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MORSE'S GARDEN GUIDE

SEEDS 1917

C. C. MORSE & Co.

SAN FRANCISCO, CALIFORNIA, U.S.A.

SEEDS C.C.MORSE & CO. SEEDS

THE MORSE BUILDING, 127 FT. X 138 FT. AT 729-739 FRONT STREET COR. BROADWAY SAN FRANCISCO.

GENERAL OFFICES – WHOLESALE DEPARTMENTS AND COMMISSION BOX DEPARTMENT – WAREHOUSE FOR WHOLESALE DEPARTMENT. GRASS SEEDS AND FIELD SEEDS

RETAIL SEED STORE
SEEDS PLANTS BULBS AND GARDEN SUPPLIES

THE SECOND STORY IS USED FOR OUR MAIL ORDER AND CATALOG DEPARTMENT.

RANCH HEADQUARTERS, SAN JUAN VALLEY NEAR HOLLISTER, CAL., 90 MILES SOUTH OF SAN FRANCISCO.

HERE WE OPERATE 1600 ACRES OF VEGETABLE AND FLOWER SEEDS UNDER OUR DIRECT MANAGEMENT. THIS ACREAGE DOES NOT INCLUDE CROPS GROWING FOR US UNDER CONTRACT WITH FARMERS

SEED GROWERS AND SEED DEALERS

IMPORTANT NOTICE

For forty years here, in California, C. C. Morse & Co. have been producing Seeds and distributing them to all parts of the world. As a result of careful selection and untiring effort to produce the best, our Seeds bear a reputation for excellence second to none.

We serve annually about 40,000 customers at our Retail Store, 125 Market St., San Francisco. This number of course represents only a small fraction of those who plant gardens, and to whom we should be the logical source of supply.

In order to reach everyone who has a garden—not only those enthusiasts who plant home gardens here in San Francisco, but every farmer and orchardist and planter in this state and neighboring territory—we are this year making a change in our usual policy and are establishing prepaid prices on all Seeds in amounts up to 10 pounds.

For the first time those who live in the country and the other cities of California, Oregon, Nevada and the western part of Arizona **are on an equality with San Francisco in buying.** Morse's Fine Seeds come to your door, if the postman does. This offer extends everywhere to the limits of the Fourth Parcel Post Zone.

We will also prepay freight charges on all seed, Alfalfa, Beans, Corn, Field Seeds, Peas, Grasses and other seeds to your railway station provided the rate does not exceed 50 cents per 100 pounds; and if the rate does exceed this amount, we will grant you a refund on your freight bill up to 50 cents per 100 pounds. Furthermore, we prepay the freight on seeds in 100-pound lots to Portland, Oregon; Los Angeles and Sacramento, California. For further details of this exceptional free delivery offer see next page.

In order to bring this about, we have not advanced our prices generally; here and there an item may have advanced, but these are exceptional cases, caused by the European war or by extreme crop shortage.

C. C. Morse & Co. raise a greater proportion of the different varieties of seeds they offer for sale than any other seed house in this country.

Morse's Seeds are the very best that can be produced, true to type, strong in vitality. Their quality is seldom equalled and nowhere surpassed. You cannot afford not to sow them.

We earnestly solicit your order. Decide now that **Morse's Seeds** are the ones you will sow this season.

Faithfully yours,

C. C. Morse & Co.,

January, 1917.

Free Delivery Offer

We deliver free all seed in packets, ounces, pounds and 10 lb. lots at prices given in this catalogue, everywhere within the Fourth Postal Zone from San Francisco. This includes all of California, all of Oregon and Nevada, the western part of Arizona and Utah. Where express is cheaper or safer we reserve the right to send small orders by express prepaid instead of by mail, and large orders by freight. Please state by "mail only" if you so wish and we will be guided accordingly. We aim to send to all "R F. D." addresses by mail only.

For more distant points the full advantage of our free delivery offer is retained. Merely add to your weight in pounds the **additional** amount in postage to the Fourth Zone rate which our free delivery offer covers. Thus the rate to Fifth Zone is 2 cents per lb. additional, to the Sixth Zone 4 cents per lb. additional, to the Seventh Zone 6 cents per lb. additional, and to the Eighth Zone 8 cents per lb. additional. Remember that 1 lb. packed weighs 2 lbs. and allow accordingly on orders for single pounds.

We prepay free the freight charges to your railway station, provided this is 50 cents per 100 lbs. or under, but where the full amount of 50 cents is not required we will not rebate the difference. To points where the freight rate is more than 50 cents per 100 lbs. we will rebate 50 cents per 100 lbs. when the paid freight bill is sent to us. This offer applies to seed only by the 100 pounds.

There is no secret about freight rates. We give below the present freight rates on seed to various points, and your railway agent will give you the rate to other towns. These will show to which places we pay full freight charges (50 cents and under) and to which we pay part freight charges (50 cents and over). Thus, you see, we lay our freight down at Portland, Oregon; Seattle, Washington; at Los Angeles and Sacramento, California, and at many other points.

RATE FOR 100 LBS. OF SEED.

California—		**California—**		**California—**		**Nevada—**		**Arizona—**	
Acampo	.14	Marysville	.23	San Luis Obispo..	.42½	Lovelock	.73	Phoenix	1.25
Arbuckle	.30	Merced	.27	Santa Ana	.42½	Reno	.73	Tucson	1.25
Atascadero	.50	Modesto	.16	Santa Barbara...	.42½	Winnemucca	.95	Yuma	1.01
Bakersfield	.51	Oroville	.29	Santa Cruz	.17	**Texas—**		**Oregon—**	
Corning	.42	Redding	.56	Santa Rosa	.15	Dallas	1.25	Albany	.60
El Centro	1.00	Riverside	.66	Stockton	.09	El Paso	1.25	Klamath Falls..	1.20
Eureka	.50	Sacramento	.18	Ukiah	.38	Fort Worth	1.25	Medford	.95
Fresno	.38	Salinas	.27	Visalia	.45	Galveston	1.25	Portland	.41
Hanford	.43	San Bernardino..	.66	Willows	.37	San Antonio	1.25	**Washington—**	
Laws	1.12	San Diego	.42½	**New Mexico—**		**Utah—**		Seattle	.56
Los Angeles	.42½	San Jose	.06	Deming	1.25	Salt Lake City	1.15½	Spokane	.69

We do not pay any postage or freight charges on anything except seeds. We do not deliver free any plants, trees, roots or nursery stock, nor any bulbs (unless priced as postpaid), nor any insecticides, tools, implements, etc. Potatoes and seed grains are quoted always f. o. b. San Francisco.

How to Order by Mail

YOUR NAME AND ADDRESS.—Be very sure that your name and address in full are written very plainly.

CASH WITH ORDER.—The proper way is to send remittance in full to cover order and postage. We send orders C. O. D. only if 25 per cent of the amount of order is enclosed. Plants we never send out C. O. D.

REMITTANCES should be made by Post-office Money Order, Express Money Order, or by Bank Draft on San Francisco. For amounts up to one dollar, clean, unused postage stamps will be accepted. Coin should not be sent by mail. Checks on local banks may be sent, which will be a great convenience to many customers. We do not accept responsibility for orders which never reach us.

SHIPPING.—We will use our best judgment as to the best way of sending orders when specific directions are not given. If special directions in shipping are needed, send them explicitly, and where express or freight office is different from post-office, so state in space on our order sheet. Paris Green, Nico Fume and other poisons are not mailable, nor are liquids like Rose Leaf and other insecticides; they must go by express or freight. Seeds do not pack well with nursery stock, because they are liable to get damp and become spoiled; it is better to have them shipped separately.

ZONE RATES may be had by application to your postmaster, who will tell you the zone which you are in with reference to San Francisco, or we will tell you as nearly as we can if you write us.

DOMESTIC PARCEL POST RATES On Seeds, Plants, Bulbs, Roots, Books, Tools, etc., within the U. S. and Possessions	First Pound or fraction	Each additional pound or fraction
First Zone—San Francisco and within 50 miles of San Francisco	5c.	1c.
Second Zone —within 50 to 150 miles of San Francisco	5c.	1c.
Third Zone —within 150 to 300 miles of San Francisco	6c.	2c.
Fourth Zone —within 300 to 600 miles of San Francisco	7c.	4c.
Fifth Zone —within 600 to 1000 miles of San Francisco	8c.	6c.
Sixth Zone —within 1000 to 1400 miles of San Francisco	9c.	8c.
Seventh Zone —within 1400 to 1800 miles of San Francisco	11c.	10c.
Eighth Zone —all over 1800 miles of San Francisco	12c.	12c.

NON-WARRANTY: Note.—There are so many contingencies to be encountered in growing plants from seed and in setting out plants that are dependent on the weather and other conditions over which we have no control, that success in planting is not altogether dependent on the seed or plant. We will send out only seed which we believe will grow and produce the kind of plant and variety represented, but:

C. C. Morse & Co. give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs, plants or trees they send out, and they will not be responsible in any way for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

SIX VIEWS OF C. C. MORSE & CO.'S SEED RANCH

Visitors are welcome

Our famous seed ranch is located in the San Juan Valley, close to the old Mission town of San Juan Bautista.

Field of Eschscholtzia or California Wild Poppies

Field of Grand Rapids Lettuce - a curled type

Thrashing Endive
We have our own special engine and thrashers

Onion seed in process of being cleaned after harvesting

Seed Cleaning Barn
This houses 16 large cleaning mills.

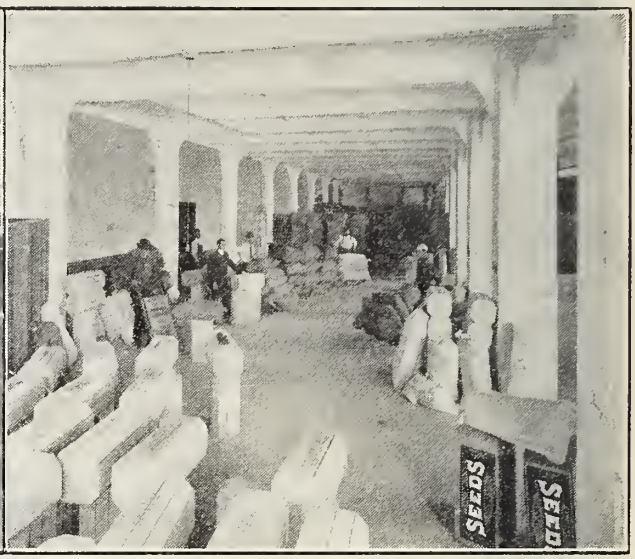
Farm office - with Mr. Landrum and Mr. Morse

Interior of C. C. Morse & Co.'s Warehouse and Wholesale Departments

The very best and most up-to-date seed-cleaning machinery and devices for handling seeds are used in this warehouse, and all seed is most thoroughly cleaned. All wholesale orders are filled from our immense stocks and are promptly dispatched.

We carry a big stock of seeds here, all in bags as illustrated. Vegetable Seeds, Peas, Beans and Corn, Field Seeds, Grasses, Clovers and Vetches are carried here in large quantities. Our spur track and fireproof cement building add greatly to our facilities for handling wholesale orders. The total San Francisco floor space occupied by us in our various wholesale, retail and commission departments covers an area of three acres. Our shipping and order departments are very important and cover no less than 35 different steamship, railroad, motor and wagon routes. Orders are usually filled and shipped the same day they are received.

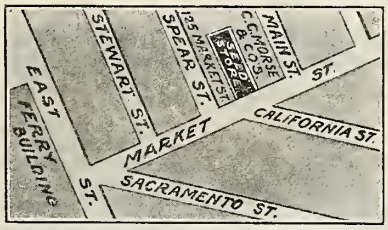
72 girls are engaged here in hand picking our Peas and Beans after they come from the ranch. This makes an extra fine grade.



The shipping end of the warehouse—first floor. Orders are assembled in separate piles and general shipment made twice a day.

A corner of the second floor, showing method of piling bags of seed. The bags are placed so as to allow a free current of air through them, and all are placed on frames or mats on the floor.

OUR RETAIL STORE, LOCATED AT 125 MARKET STREET, SAN FRANCISCO—REMEMBER THE NUMBER—125
Photo by Cardinell-Vincent Co.



This diagram shows our store at the lower end of Market Street on the South side, in easy distance to the Ferry Building, two short blocks away. Remember the building, number 125, for Morse's Seeds.

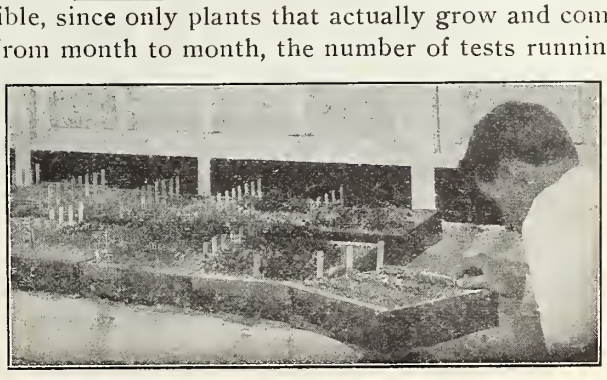
THE RETAIL STORE OF C. C. MORSE & CO.

This is the place to purchase **Morse's Seeds** if you can come to our establishment. Here also is a library and a horticultural encyclopedia which are available to all. We hope you will call, but if you cannot, your order will receive the same care as a personal call. All mail orders are filled on the second floor of this building from the same seed used in filling counter orders.

How We Test Our Seeds to Determine the Percentage of Vitality.

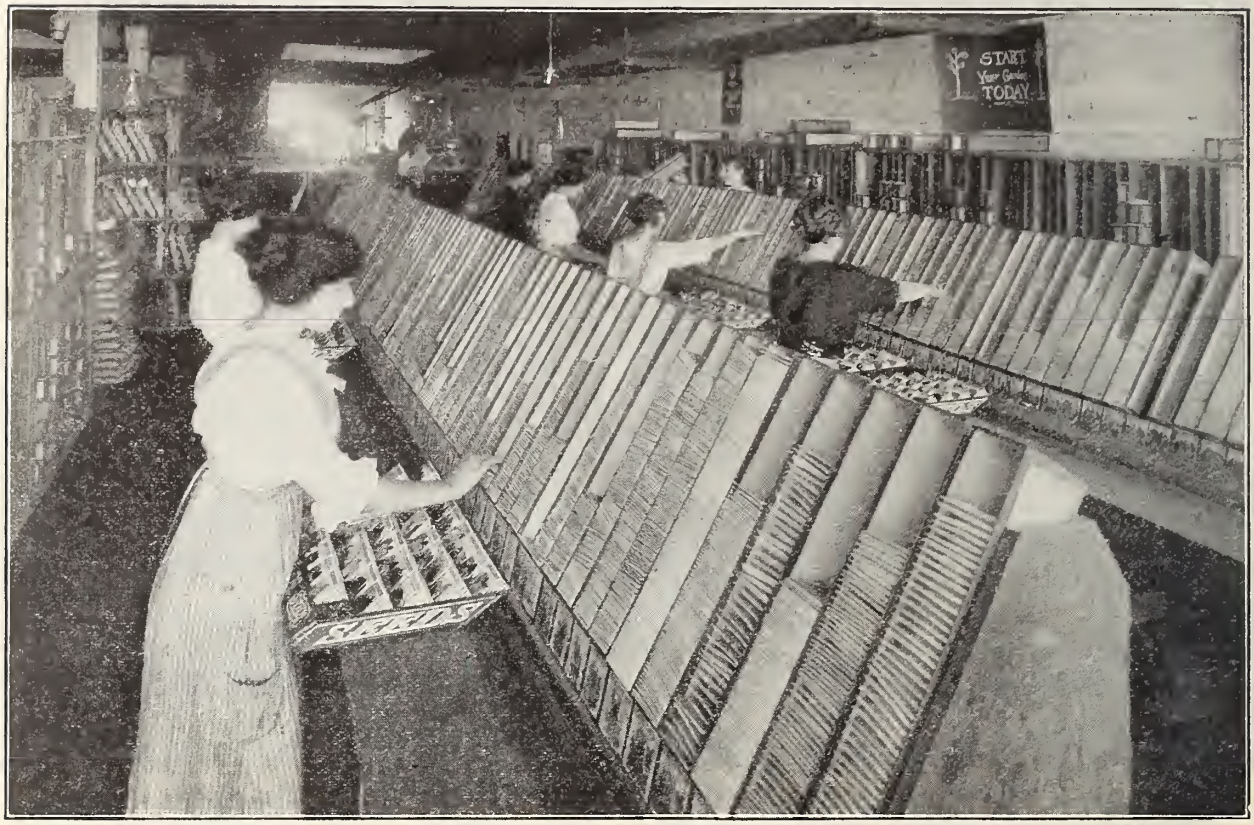
Testing for germination is done in our greenhouse, in soil. This is the most rigid system of testing that is used and is the fairest method possible, since only plants that actually grow and come above ground are counted. All seeds are tested from month to month, the number of tests running into the thousands.

To test our seed costs several thousand dollars each year. If sowing seed which you know can grow is of benefit to you, you should sow **Morse's Seeds** and get the benefit of our carefulness and of our greenhouses.



Counting the plants. Every picket indicates a row in which 100 seeds were sown. In each box is one row of a variety previously tested and called a check sample to indicate whether conditions were proper for the best results.

VIEWS OF C. C. MORSE & CO.'S DEPARTMENT FOR COMMISSION SEEDS



Packing our patented metal seed display racks with papered seeds

Morse's Commission Boxes are now one of the familiar sights in practically all the general stores throughout the Southern States, the Pacific Coast and the Northwest Territory. **There are very few stores in this territory which do not carry one or more of these metal racks with Morse's seeds.**

Morse's High Class Seeds can be purchased from this rack in over 20,000 stores

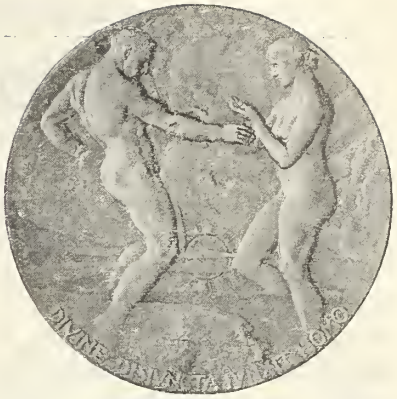
Our close attention to this department and our determination to serve the people efficiently has developed an immense business. In many respects the Commission Box department is a distinct and unique method of operating the seed business, but the seed that the planter buys from us is just the same whether he buys it from the box, the catalogue or the store.

The papering of seeds for our commission boxes represents the handling of millions of five-cent and ten-cent flat papers and cartons. The best seeds we produce, and also the freshest, go into these commission box assortments.

In ordering seeds from the store, be sure to insist on having Morse's.

The great Panama-Pacific International Exposition awarded C. C. Morse & Co. for their seeds and vegetables:

9 Grand Prizes
7 Medals of Honor
14 Gold Medals
3 Silver Medals



The above is a record never before attained by any Seedsman or seed grower at a single Exposition. It is perhaps the greatest number of Awards given any single business at the Panama-Pacific International Exposition.

THE AWARDS WERE ALL MADE ON THE ACTUAL PRODUCT OF MORSE'S SEEDS GROWN ON OUR OWN FARMS AND TRIAL GROUNDS. We did not hunt for the best specimens from all over America for our Exhibits, but depended on the quality of the product of our seeds naturally grown on our own farms and from the seed we sell. This point was appreciated by the Juries and they have commended and stamped their approval indelibly of the splendid quality of Morse's Seeds.

WHAT DO THESE AWARDS MEAN TO OUR FRIENDS AND TO US?

TO OUR CUSTOMERS AND TO THE BUYING PUBLIC they are a guarantee of the highest possible quality in Seeds.

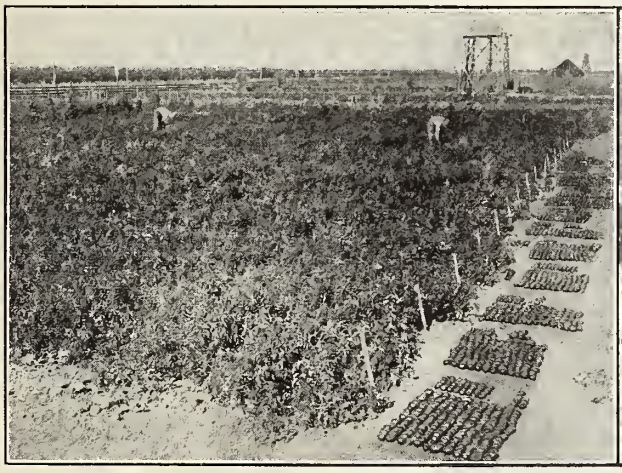
TO US they are a great reward for the work we put on our strains on the farms and for the care we exercise to produce and sell the best seeds.

We are proud of our record. Others appreciate our Seeds. Do not you?

C. C. Morse & Co.'s Trial Grounds

At Harder Station, near Hayward, on the Niles Branch of the S. P. R. R.

A sample of every lot of seed is grown at C. C. Morse & Co.'s Trial Grounds to see whether it conforms to their high standard for productiveness and quality. This is one reason why **Morse's Seeds** are the best, because only those which show well under field conditions are retained and sold by us. Our extensive work here is of direct benefit to you, which you can get with **Morse's Seeds only.**



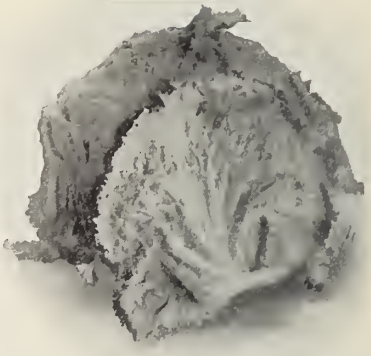
The Tomato Trials

Each tomato row represents from 50 to 100 plants. When ripe the fruit is picked once a week and spread on the ground, right side up. The size, weight and general appearance of the fruit, as well as the vine, are noted, and earliness or lateness, vigor of plant and every interesting detail is recorded.

The Cucumber Trials

About 25 hills of vines of each variety are tested, and the fruits are allowed to remain until dead ripe. Then, in the case of cucumbers, the fruits are picked and spread out along the row as indicated. In the picture will be seen the watermelon and muskmelon trials at the rear of the cucumbers and tomatoes.

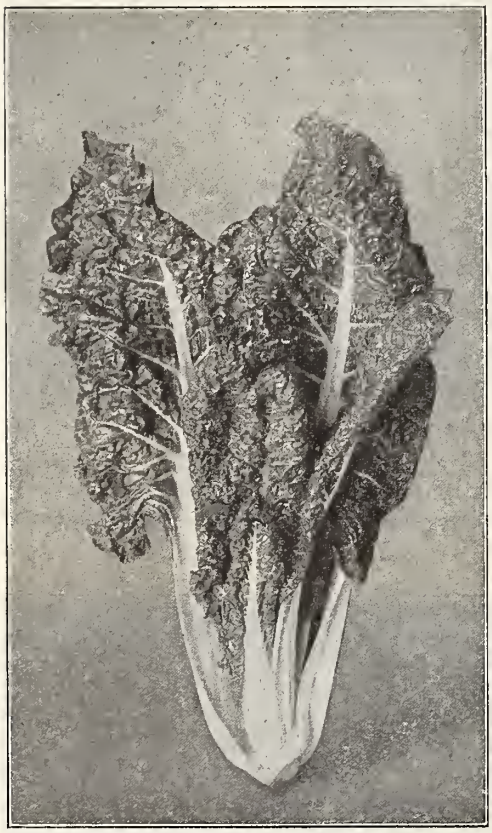
LOS ANGELES LETTUCE



Los Angeles Lettuce

This is the premier lettuce for California and the sort seen in all of our vegetable markets. The head is not so large as to ever be coarse, and the quality is delicious. Los Angeles is the crispest, whitest, most satisfactory lettuce of just the right size there is. Color dark green. It should be in every garden. Morse's strain is the very best, raised on our own seed farms. Lettuce seed should never be deeply covered; one-eighth inch or less is proper; also allow twelve inches for each plant. (See front cover for this in colors.)

Pkt. 5c; oz. 20c; ¼ lb. 60c; 1 lb. $2.00.



Giant Lucullus Swiss Chard

NEW TABLE BEET
Morse's Improved Globe

See illustration in colors on front cover.

We are sure that our customers, when they have seen it, will be as enthusiastic over this new beet as we are. Morse's Improved Globe has nearly globe-shaped roots, with a very smooth surface. The exterior color is a bright deep red and the interior a rich, bright vermillion red, with very little zoning. This beet retains its color remarkably well when cooked. When served warm or made into pickles, Morse's Improved Globe is sweet and very tender. The variety is desirable both for the market and the home garden. The tops are small and the leaves are dark green, veined with red. This beet is a splendid acquisition to our list of the finest vegetables. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

NEW SWISS CHARD or SPINACH BEET: Giant Lucullus

This comparatively new variety is not only very good in quality, but it is also the most attractive in appearance of any of the chard. Giant Lucullus is a strong and rapid grower, attaining a height of 2½ feet. Leaf stems long and broad and thicker than the ordinary variety. The leaves are light, bright green in color and are distinctly crumpled or savoyed. Quality very good. It cooks very easily and is tender and sweet. Try cooking the stalks and serving like asparagus; they are excellent. **Pkt. 10c; oz. 20c; ¼ lb. 60c.**

WONG BOK

Chinese or Celery Cabbage

Wong Bok has a mild cabbage flavor, very delicate and delicious. One Chicago commission house handles this new vegetable by the carload, so great is the demand. Wong Bok makes delicious slaw; also a very fine salad. When cooked it makes greens delicately cabbage-flavored and not at all like boiled cabbage. It blanches to almost clear white.

The culture for Wong Bok is the same as for Winter Cabbage. The seed should be sown in July or early August, and early in September the plants should be transplanted. They should be set one foot apart in the row and pushed down one and one-half inches in the ground. When well grown the plants should be blanched by tying closely with burlap. Any good soil is sufficient, but they seem to head up best on rich black adobe soil.

Pkt. 10c; oz. 50c; ¼ lb. $1.50; lb. $5.00.

3 GRAND NEW MELONS

They have entirely different flavors, and belong to entirely different groups. They are as distinct as can be. All are delicious. That is the one reason we bring them to your attention.

Honey Dew Melon

HONEY DEW MELON

Hybrid Cassaba

The Melon that took the Chicago market by storm.

This absolutely new melon is a winner, and we offer it with great pleasure to our customers after having thoroughly proven its merit at our Trial Grounds.

Honey Dew is a medium sized melon, 5 to 6 pounds in weight, about 6 inches in diameter and slightly oblong. The skin is smooth, with an occasional net. The color, while growing, is nearly white, and when ripe is a creamy yellow, sometimes a lemon yellow.

Honey Dew has very thick flesh, light emerald green in color. It is fine grained, melting and delicious, and is good clear down to the rind. Sometimes the older Cassabas have a bland or cucumber flavor not enjoyed by many. Just to show you how hard it is to describe a flavor, look at the originator's description: "I named the melon Honey Dew. It is as sweet as honey and has the mingling of several flavors—pineapple, banana and vanilla predominating." That's some flavor, isn't it? What we say is that it is delicious.

The vines are strong growers and are productive. The melons slip from the vines when ripe, but may be picked just before they are ripe and stored in a cool place and then they will keep until Christmas.

The originator's history of Honey Dew is given on page 33. Honey Dew brought the highest price in the market and netted the originator $2,400 per acre. Seed of Honey Dew Melon is worth

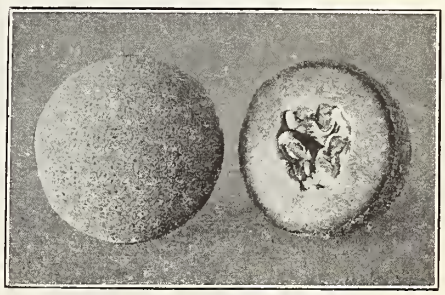
Pkt. 15c; oz. 50c; ¼ lb. $1.50; lb. $5.00.

MUSKMELON: Gold Lined Rocky Ford

As the front cover shows, this melon is practically without ribs and is finely netted all over. It is the same shape as the famous Rocky Ford and originated in the same town. It will be another wonderful shipping melon.

Gold Lined Rocky Ford has exceptionally sweet and delicious flesh of that rather high muskmelon flavor. It is light green and edged with orange at the center. The seed cavity is unusually small. It is truly an extra fine variety of the muskmelon flavor and desirable in every garden.

(See front catalogue cover.)



Gold Lined Rocky Ford

Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. $2.00.

PERSIAN MUSKMELON

This is quite a large melon, from 8 to 10 inches in diameter, and is heavy for its size. The melons are heavily netted and are globular. The flesh is firm and frequently rather hard. Its color is bright orange. The flavor is different from other melons, and, although one may have to acquire a taste for them, some people are exceedingly fond of this delicious melon. Pkt. 10c; oz. 30c; ¼ lb. 90c; lb. $3.00.

Persian Muskmelon

NEW PUMPKIN—Morse's Marrow

Won a GRAND PRIZE at the P.-P. I. E.

Morse's Marrow Pumpkin

This grand pumpkin has proven all that we claim for it. It is an immense cropper, not only in fruits but in weight. Twenty tons to an acre is a good yield, but not exceptional. Good sized pumpkins are two feet across and weigh 150 lbs. each, and there are many such.

Morse's Marrow is a very large, round, flat pumpkin, brilliant vermillion orange in color, and the handsomest pumpkin in existence. The flesh is very thick and solid and is bright orange-yellow in color. The seed cavity is amazingly small and on this account there is but little seed, which means it will never be a cheap variety.

Morse's Marrow is the handsomest, largest, finest, most perfect pumpkin we have ever seen. Pkt. 15c; 2 pkts. 25c; ¼ lb. 60c; ½ lb. $1.20; lb. $2.

Here is what one of our customers has just written us:

Sheridan, October 20, 1916.

I am writing you to tell you of the success I had this summer with the Morse's Marrow Pumpkin. From a package of fifteen seeds I had fourteen vines, which grew on red soil, well fertilized, without irrigation. From those vines I got fifteen beautiful pumpkins exactly as pictured on front page of your catalog. Ten of those weighed over fifty pounds each; one weighed fifty-three pounds, but my vines were cut down by green aphis, which had gotten such headway before I discovered them that spraying did no good. I got them planted late, about the 15th of May. As we had no rain after the 15th of February, I think that very good. And such delicious pies those pumpkins make! I have divided with the neighbors, as one is more than I can handle, and such praise that they get is worth my trouble.

Respectfully, *MRS. F. E. BURRITT.*

SEED POTATOES

Potatoes are not yielding as much in California as they have been. Frequently fields give only one-half as much per acre as they did formerly, and the half which is lost is, of course, the entire profit. The reason for this is two diseases of the potato—Rhizoctonia and Fusarium, or wilt. These are both fungus diseases, and will live in the soil for as long as seven years, although no potatoes have been grown in the meantime.

If your land is free from this disease, by all means keep it free at any cost. This means never to plant diseased potatoes for any reason. The disease, once in, will stay in.

So important does the State Commission of Horticulture consider disease-free seed potatoes that they are willing to inspect growing fields, under certain conditions, and "certify" that they are clean. Seed from these fields may be safely planted and will be free from disease. It will cost more than potatoes bought in the open market, but it is safe, and the best kind to plant on new land.

Send to the State Horticultural Commission for their literature on this subject. Diseased potato land must not increase in this state.

We cannot be sure this year of a sufficient supply of "certified" seed. We sell two grades of seed potatoes, **Certified Seed** and **Selected Oregon Seed.** Write for prices and information.

MORSE'S Vegetable Seeds 1917

The proper distances to set rows of the different plants in gardens will be given with each sort. Do not overcrowd but leave space for good development. Sow small seeds of vegetables not over ½ inch deep and keep soil regularly moist by watering. The proper depth to sow is given in the table on page 50. Remember that no seed can come up through a crust caused, for instance, by a north wind. Replanting in such a case will probably be necessary. Plants which require heat will not start in damp, cold ground; wait till conditions are better or choose another situation. Firm the soil after planting. Watch for cut worms and slugs. Keep the ground cultivated and crops growing fast; this means tender vegetables.

Well known standard varieties which have been thoroughly tried and can be depended on are indicated by larger type.

ARTICHOKES

Artichokes are cultivated for the edible bud, which resembles a giant thistle. The plants want a very rich soil and plenty of moisture. In California the seed should be planted in boxes in January and the young plants transplanted in March or April. While plants usually bear for five or six years, it is advisable to start new ones occasionally. They do not, however, come wholly true from seed, and it is necessary to discard a good many plants, using the best ones only for propagating. Plants bear next spring; the seed in two years. Set two to three feet apart in three to five-foot rows.

JERUSALEM OR TUBEROUS-ROOTED ARTICHOKE. Entirely distinct, and grown exclusively for their large potato-like roots, which are valuable for feeding hogs, the yield often exceeding two tons per acre. They need not be dug, but the hogs can be turned into the field to root them up. The tubers are also edible, and are delicious when well cooked. Can supply January to March only. Plant 5 sacks per acre. **Per lb. 20c; 10 lbs. $1.20; 100 lbs. $4.50.**

Artichoke—Large Green Globe

LARGE GREEN GLOBE. The most popular variety Buds large, globular, deep green. Weight, 1 lb. each, or 4 lbs. per doz. **Pkt. 10c. Strong roots of this variety, packed, 15c each; $1.25 per dozen.** Postage 5c each; best sent by express.

ASPARAGUS SEED and ROOTS

It requires three or four years from the time of planting asparagus seed to the time that the plant produces shoots suitable for eating. To raise plants from seed about one pound per acre is required, or one ounce for about 800 plants. Sow early in the spring in drills 12 to 14 inches apart and thin to about three inches in the row. Allow the plants to grow two full seasons and then transplant to permanent beds. It requires about 3000 plants to set an acre. When set out for crop, in the field or in beds, they require plenty of room, since the plants spread from the root, and therefore grow larger each year. In the field the rows should be from six to ten feet apart. A loose, porous soil is necessary for good asparagus, and the flavor of the young shoots depends greatly upon the character of the soil. The light, fibrous soils of the Sacramento River islands seem especially adapted for perfect asparagus.

In the house garden the soil, if naturally heavy and stiff, must be made porous and light by spading in the proper amount of manure and sand. During the spring all the shoots must be cut as fast as they reach the surface. Later in the season all the shoots should be allowed to run to seed, and in the autumn all the tops should be cut off and burned and the land thoroughly cleaned up, and a good dressing of manure and wood ashes and sand should be spaded into the beds.

BARR'S MAMMOTH. A favorite with market gardeners. Shoots very large, tender, quick growing and thick to the top. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 60c.**

COLUMBIA MAMMOTH WHITE. A large, thick variety; very white, even above ground. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 65c.**

CONOVER'S COLOSSAL OR BOULDIN ISLAND

A standard variety for all purposes, especially for canning. It is the popular variety formerly used on Bouldin Island and other river points in California where it is canned in immense quantities. It makes large, thick, white shoots of delicious flavor, and we recommend it as the best variety for all purposes. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c**

PALMETTO

This is the most popular variety grown for general garden purposes, especially for shipping. Shoots are light green and tinted slightly with pink (see illustration). **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 55c.**

ASPARAGUS ROOTS

(Weight estimated at 5 lbs. per 100)

Large, vigorous roots of Palmetto and Colossal **25c per doz., postpaid; $1.10 per 100, by freight, prepaid as per our special offer; $6.00 per 1000.**

BEANS DWARF OR BUSH GREEN PODDED

In this class are the dwarf beans having green pods. The newest and best varieties are now absolutely stringless.

Beans require a light friable soil, with plenty of moisture, and they are very sensitive to frost. In California they should not be sown earlier than April 15th. In the garden the soil should be made mellow and rich, and kept so, and all pole varieties should be provided with poles or a trellis on which to climb. For a garden crop plan string beans in succession every four weeks throughout the season. Sow in rows 18 inches to 24 inches apart, and cover from one to two inches deep, but not more. Keep the pods picked and the vines well watered and the beans will continue bearing much longer than if he vines are allowed to become dry. Hoe the rows occasionally.

For farm crop plant about 25 pounds pole beans per acre, in rows 36 inches apart; plant bush beans about 35 pounds per acre in rows 24 inches apart. Heavy clay or adobe soils are not best for beans. For the home garden there should be a succession of five or six varieties to provide the table with early, medium and late beans. Use one pound of seed for 100 feet of row.

In this State the bean crop is so far limited only by the amount that can be profitably sold—the best bean districts are in San Luis Obispo, Santa Barbara and Ventura counties. The California bean crop in 1910 was 2,600,000 sacks, and is being increased each year. Commercial plantings are made usually from May 10th to 25th.

The Bean crop is very short this year, and on some varieties was a total failure. We harvested in some instances less seed than we sowed. We are doing our best to fill all orders for our customers.

Commercial Beans have been so high in price for the past year that they have been a luxury. These bush beans may be used green for snap beans, and if they are allowed to grow older and used as green shelled beans they are still delicious.

See page 2 for special free delivery offer.

CANADIAN WONDER. A hardy and thrifty variety bearing long green pods of fair quality. The seed is a rich mahogany red and very attractive. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

Early Long Yellow Six Weeks. A long podded green variety. Plants strong and vigorous and leaves large, of fair quality. Seed long, kidney-shaped, light-yellow with darker marks about the eyes. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

Extra Early Refugee. A very early, green-podded variety, with medium-sized, green, fleshy pods; seed drab, freely spotted with dark purple. The vines are smaller and of more upright growth, and leaves a little larger than the Late Refugee. The pods are round and make an attractive appearance when shipped to market. Their color is lighter than most of the green beans. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

MORSE'S SELECTED STRINGLESS GREEN POD

We have made a selection of this favorite bean, which is absolutely stringless. Nor have any of its good qualities suffered. The pods are very tender and of the best quality—thick and meaty and long. The plant bears well and is a variety which will more than give satisfaction. Probably if there is one best bean in this class for the home garden it is Morse's Stringless Green Pod. Seed brown. **Pkt. 10c; lb. 35c; 10 lbs. $3.00.**

French String Bean. A hardy green-podded variety, with black seed. Is much esteemed by the Italian market gardeners for a very productive string bean and a good shipper. A great many of the string beans in the San Francisco markets are of this kind. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

Morse's Selected Stringless Green Pod

Black Valentine. A long-podded green variety, recommended for shipping and for table. Pods are straight, early and of good quality. Seed black. This variety is popular in some sections on account of its exceptional blight resisting qualities. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

Dwarf Horticultural. A very vigorous variety with large leaves, used as a shell bean, green or dried. **Pkt. 10c; lb. 35c; 10 lbs. $3.00.**

Early Mohawk. A hardy and early variety, with large, flat, dark-green pods with tapering points; seed long, kidney-shaped; drab, purple and brown. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

ENGLISH OR BROAD WINDSOR. This is not a string bean of any sort, but a very well-known, popular variety with many farmers. Familiarly known as the Horse Bean. **Pkt. 10c; lb. 15c; market fluctuates on 100 lbs. from $4.50 to $6.00.**

EXTRA EARLY RED VALENTINE. A popular variety; erect vine with dark-green leaves. Pods of medium length; fleshy, round and saddle-backed, with only slight strings. Seed pink, marbled with red. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

MORSE'S SELECTED REFUGEE OR 1000 TO 1

If there is any dwarf bean so prolific as Morse's Selection of Refugee we have never heard of it. As many as 150 pods are found on one vine. These pods are long and green, becoming lighter in color as they mature. Not an extra early bean, but a hardy one and an extra heavy bearer. **Pkt. 10c; lb. 35c; 10 lbs. $3.00.**

Our beans are raised here in California and every individual field is visited and rogued of all types not the best.

BEANS DWARF OR BUSH WAX PODDED

In this class are the dwarf beans, having creamy white, yellow and golden-yellow pods. Most of the varieties listed are stringless. The choice of wax or green podded varieties is purely a matter of choice. Both classes are easily grown. In regard to sending by express, freight or parcels post, see page 2.

MICHIGAN WHITE WAX. A hardy white seeded wax bean. It produces long, straight, golden-yellow pods, which are entirely stringless at all times. The plant is very erect and stands well in wet weather. Its quality is superior to almost any other wax bean, and it bears well, producing big crops. **Pkt. 10c; lb. 40c. Crop failed.**

CHALLENGE BLACK WAX. One of the standard wax beans. Of excellent quality and very prolific. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

Davis White Wax. The most hardy and productive wax-podded variety. The pods are very long and yellow, and while not stringless, it is a remarkably good bean for shipping; seed white, and on this account is desirable for a shelled bean in winter. **Pkt. 10c; lb. 35c. Crop very short.**

MORSE'S GOLDEN WAX

One of the best beans in cultivation. Pods are long, nearly straight, broad and flat, and golden yellow; seed white, more or less covered with two shades of purplish red. All gardens should have them. None will be found better in all ways than Our Selection of Golden Wax. **Pkt. 10c; per lb. 40c; 10 lbs. $3.50.**

PROLIFIC BLACK WAX

An improvement on the old Black Wax or Butter Bean. Very vigorous and prolific; pods fairly long, golden-yellow, very brittle and stringless; seed black. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

Morse's Golden Wax Bush Beans

WARDWELL'S KIDNEY WAX. A strong growing bush, 15 inches in height. A little later than the Golden Wax; pods long, broad, golden-yellow, brittle and entirely stringless. Market gardeners find this bean one of the most profitable. **Pkt. 10c; lb. 40c. Crop failed.**

IMPROVED RUST-PROOF GOLDEN WAX Quite rust-proof and rather harder than Golden Wax, and the pods are broader and flatter; seed white, somewhat spotted with purplish red. **Pkt. 10c; lb. 40c; 10 lbs. $3.50.**

BEANS

POLE OR RUNNING

GREEN AND WAX PODDED

These beans require a pole or trellis to climb on, if planted in the garden, although when raised as a seed crop in the open field they need no support whatever. Pole beans are usually very prolific, and bear longer pods and a great many more of them than the bush varieties. For home garden use set the poles well in first, scrape the soil away to a depth of two inches and irrigate well. Then plant five to nine beans on each hill, covering to a depth of one inch. Save only the best three or four plants. Pole beans will continue bearing long after the earlier bush varieties have ceased. Hills should be three to four feet apart each way.

BURGER'S GREEN POD STRINGLESS POLE. A new pole variety of great merit. Bears long, brittle, stringless pods of excellent flavor. It rivals all other pole beans and is destined to become the most popular of all; pods green. This bean is frequently called the White Seeded Kentucky Wonder. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

Horticultural or Speckled Cranberry. An old favorite. Pods short, pale green, becoming splashed with brownish red. Seed blush pink, spotted with red. Valuable either green or dry shelled. **Pkt. 10c; lb. 25c; 10 lbs. $2.00.**

Indian Chief or Tall Black Wax. A black-seeded wax variety with thick, golden-yellow pods. Very hardy and prolific, and the most popular of the pole wax beans. **Pkt. 10c; lb. 35c; 10 lbs. $3.00.**

KENTUCKY WONDER OR OLD HOMESTEAD The best and most popular of the pole varieties and should be in every garden where beans are planted. It grows luxuriantly and bears for a long period. Pods are very long, very fleshy, and deeply creased or saddle-backed; green in color and stringless. **Pkt. 10c; lb. 30c; 10 lbs. $2.25.**

KENTUCKY WONDER WAX. An excellent variety and one of the very best pole beans. The pods are long, very thick, meaty, deeply saddle-backed, entirely stringless and bright yellow in color. The vine is thrifty and very prolific. Seed deep brown. **Pkt. 10c; lb. 35c; 10 lbs. $3.00.**

Lazy Wife. A green-podded variety bearing good, long pods in clusters; stringless and of peculiarly fine flavor; seed rather large, thick and white. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

SCARLET RUNNER. The well-known and old-fashioned climber, having bright scarlet, pea-like flowers. It not only holds its place as a flower, but the pods when young are of fine quality for cooking. Seed large, bright scarlet, heavily blotched with purple. Scarlet Runners bear well in San Francisco, where the climate is very cool. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

White Creaseback. An early, green-podded variety. Pods five to six inches in length, deeply creased or saddle-backed, and borne in clusters. Are very fleshy and stringless; seed white and can be used as a shelled bean for winter use. Can often be grown without poles. **Pkt. 10c; lb. 25c; 10 lbs. $2.00.**

White Dutch Case Knife. A climbing variety with long, flat irregular pods, which become creamy white as they mature; seed broad, flat and clear white. **Pkt. 10c; lb. 30c; 10 lbs. $2.25.**

White Tepary Bean. A wonderful new shell bean for dry localities. Most remarkable results have been obtained by this bean which will withstand drought and will yield good crops in the hot San Joaquin and Sacramento valleys. Recommended for places where, ordinarily, beans will not grow. Tepary beans give a profitable new crop to thousands of acres. Quality excellent. Beans are pure white and a little smaller than the well known "Small Whites." Originated in Arizona. Tepary beans are selling at very profitable prices this past year. **Pkt. 10c; lb. 20c; 10 lbs. $1.75; 100 lbs. $8.50.**

Remember, there's an entirely new and delicious flavor in Honey Dew Melon, different from every other melon. See page 9.

Kentucky Wonder Bean

LIMA BEANS

Lima beans are delicious when used green shelled, and can be grown for this purpose in any climate. The dry ripened bean is also a staple article of food for winter use, but in California these beans ripen only from San Luis Obispo County and south to Pasadena. The best territory for seed beans we believe to be Santa Barbara and Ventura counties, where we grow our stock. Sow bush sorts in 24-inch rows and pole varieties in hills 4 feet each way. Sow late after ground is well warmed in spring.

BUSH VARIETIES

BURPEE IMPROVED BUSH This bean produces magnificent crops of pods, which measure from five to six inches long by one and one-quarter inches wide. As compared with the original Burpee Bush Lima, both pods and beans are very much larger, while the beans, either green or dry, are nearly twice as thick. The beans have the same luscious flavor as the best flavored Limas, and are ready to use six to eight days earlier. It will outyield the Burpee Bush Lima by fully one-third, this greater yield being due to the increased size of pod and beans. The dried beans are very handsome and generally show a greenish-white coloring. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

BURPEE'S BUSH. The best late dwarf variety. Plant 18 to 24 inches high; very prolific. Pods large, and the beans are also large and heavily ribbed. Will bear until stopped by frost. **Pkt. 10c; lb. 30c; 10 lbs. $2.25.**

Dreer's Bush or Kumerle. A very prolific variety, a little later than Burpee's and having short, thick pods, closely filled with short, almost round seed. The plant does not grow upright, but spreads or trails over the ground about three feet in diameter. **Pkt. 10c; lb. 30c; 10 lbs. $2.25.**

FORDHOOK BUSH There are from three to five beans in each pod, with an average of four. The beans are round and thick, like those of Dreer's Bush, and have the same mild, delicious flavor. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

Henderson's Bush. The earliest variety we have, being fully two weeks earlier than any other variety. Plant about 16 inches high and very prolific. Beans are small. Especially recommended for planting in the North and where the season is short. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

POLE VARIETIES

Challenger, or Dreer's Pole. A splendid pole variety, quite early, very prolific and of very fine quality. The pods are borne in clusters, and the beans are short and thick, almost round, and crowded so closely in the pod that the ends are flattened. A very popular variety with market gardeners. **Pkt. 10c; lb. 30c; 10 lbs. $2.25.**

King of the Garden

EARLY LEVIATHAN. One of the newer varieties and the very best pole variety in cultivation. Vine very tall and strong; pods long and borne in clusters; beans large and white. Is early, strong-growing and prolific. **Pkt. 10c; lb. 30c; 10 lbs. $2.50.**

KING OF THE GARDEN

One of the best and most popular main crop varieties. It is medium early and has very long pods, 5½ to 6½ inches long, which are well filled with four or five good-sized beans. The pods are very straight and handsome, and the fine, hardy vines bear abundantly. **Pkt. 10c; lb. 30c; 10 lbs. $2.25.**

Sieberts Early. A standard early variety, with good-sized pods and large beans. **Pkt. 10c; lb. 30c, 10 lbs. $2.25.**

Burpee's Improved Bush Lima

THE VALLANCE NURSERY, formerly our Nursery Department, has a fine assortment of handsome Ornamental Trees and Shrubs, Climbing Vines and Roses. Reached by the Key Route System, Piedmont Station, from San Francisco, or by street car from Oakland. The Nursery is located at 41st Street and Glenn Avenue, Oakland. All goods may be ordered at our store, 125 Market Street, San Francisco. *See Page 96 and following in this catalogue.*

BEETS

FOR TABLE AND FARM

Beets are divided into three classes—**TABLE, MANGELS or STOCK-FEEDING, and SUGAR.**

For table use the seed can be sown in California any time after January 1st, and a light sandy loam is preferable for good shaped roots of good color. The soil must be rich and moist to get a quick growth, which is essential to crisp, tender flesh. Sow in rows 12 to 18 inches apart and thin by using the small beets for greens until they stand 3 to 4 inches in the row.

TABLE VARIETIES

CROSBY'S EGYPTIAN More globe-shaped than Extra Early Egyptian, and the best known and most popular variety; is very early and of fine quality. Bright red with clear vermilion flesh. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

DETROIT DARK RED An extra fine beet, and the one we recommend for all garden purposes. Globe-shaped; bright, but rich red flesh. Tops small and green. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.10.**

Early Eclipse. A fine, early table beet, top-shaped or tapering, globe-shaped. Flesh deep crimson, zoned with pink. Crisp and sweet. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Extra Early Blood Turnip. A good variety for summer and autumn use. Is turnip-shaped, with bright red flesh, showing zones. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Half Long Blood. A half-long variety about eight inches long and tapering abruptly. Very rich, deep red flesh of fine quality. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c.**

Eclipse Beet

Extra Early Egyptian. A turnip-shaped variety with dark-red flesh, showing zones of a lighter shade. Dark leaves; a good table beet and very early. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 85c.**

LONG SMOOTH DARK BLOOD. A very desirable variety for light soils, where roots are easy to dig. Skin very dark brownish-red. Flesh deep blood-red. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 90c.**

MORSE'S IMPROVED BLOOD TURNIP

A turnip-shaped beet with deep red flesh. Tops green. A fine selected strain. The quality of Morse's Strain is unusually good; the texture being fine and even, and the roots superior in every way. We recommend this as most excellent sort for either home garden or market planting. The beets are regular and of finest appearance. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

MORSE'S IMPROVED GLOBE

A new globe beet, early and delicious for table. Color is vermillion throughout, which is retained after being cooked. This variety has dark green leaves and very smooth roots of exceptionally fine texture. See front cover in colors. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

Morse's Improved Blood Turnip Beet

MANGEL WURZEL, OR STOCK BEETS

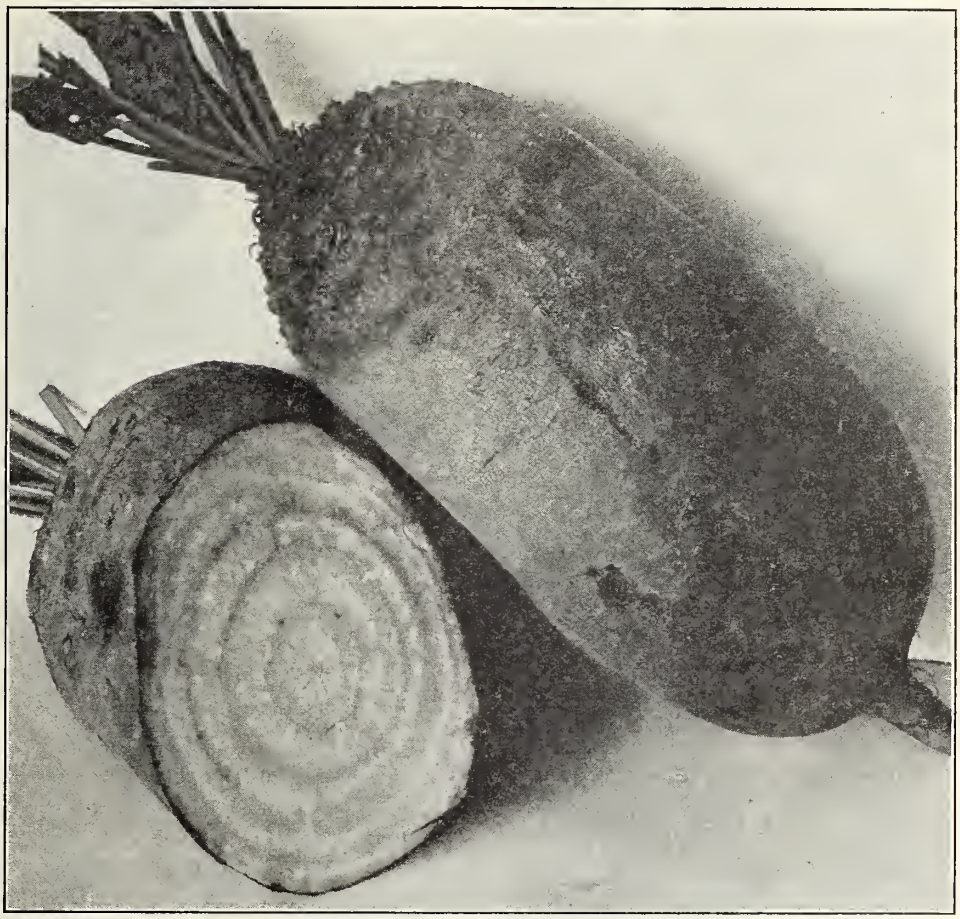
FOR STOCK FEEDING. For main crop sow about March 1st in rows 22 inches apart, using about five pounds of seed per acre. To get good, large and uniform beets, the plants should be thinned when in the fourth leaf to six inches apart in the row.

If large lots of seed are wanted, write us for special prices.

Champion Yellow Globe. A large round, orange-yellow variety. Good for shallow soils. **Pkt. 10c; lb. 60c; 10 lbs. $5.50.**

Giant Yellow Intermediate or Gate Post. A yellow-skinned variety with white flesh, zoned with yellow. Large and ovoid shape. **Pkt. 10c; lb. 75c; 10 lbs. $7.00.**

GOLDEN TANKARD YELLOW-FLESHED. Very large yellow-fleshed variety. Giant oval shape; small yellow-stemmed top. Golden Tankard is better adapted for heavy soils because it is much more easily harvested than Mammoth Long Red. The yield is enormous. Cattle do not tire of this variety for continuous feeding. **Pkt. 10c; lb. 60c; 10 lbs. $5.50.**



Golden Tankard Mangel Beet
This huge beet grows three quarters above ground

MAMMOTH LONG RED

The largest of all the mangels and the heaviest cropper. Skin is red, flesh white, zoned with red. This variety produces a larger amount of good feed than any other beet, and is recommended as superior to all others. **Pkt. 10c; lb. 60c; 10 lbs. $5.50.**

Red Globe. A large globe-shaped variety with red skin. Flesh white, zoned with pink. **Pkt. 10c; lb. 60c; 10 lbs. $5.50.**

Yellow Leviathan. A large yellow, olive-shaped variety, with clear, white, brittle flesh. The root grows partly out of the ground, rendering it easy to dig. **Pkt. 10c; lb. 60c, postpaid; 10 lbs. $5.50.**

SUGAR BEETS

Giant Half-Sugar, Green Top, for Feeding Stock. A beet which is superior to mangels for stock-feeding purposes, as it is more nutritious, having a large amount of sugar. It is oval in shape and grows partly out of ground. Is of large size and yields enormous crops. **Pkt. 10c; lb. 60c; 10 lbs. $5.50.**

Klein Wanzeleben Sugar. The most popular variety for sugar factories. The sugar content depends on intelligent care and development on the part of the seed grower. It is wedge-shaped, wide at the top and tapering gradually to a long tail. This variety is most planted by sugar factories as it has a high sugar content; makes good food for cattle. **Pkt. 10c; lb. 60c, 10 lbs. $5.50.**

Lane's Improved Imperial Sugar. Large thick, tapering variety. Yields almost as much as mangels. Is sweet and rich and very desirable for stock. **Pkt. 10c; lb. 60c; 10 lbs. $5.50.**

Vilmorin's Improved Sugar. A little smaller than Klein Wanzeleben, but even richer in sugar and a valuable variety for sugar factories. Grows entirely under ground and yields good crops under ordinary conditions. **Pkt. 10c; lb. 60c; 10 lbs. $5.50.**

WHITE SUGAR

ROSE TOP. For feeding stock. A very hardy variety producing large crops with little care. The root is large and very rich in sugar, and while not sufficiently so for sugar purposes, it makes a remarkably fine, rich food for stock. **Pkt. 10c; lb. 60c; 10 lbs. $5.50.**

SWISS CHARD OR SEA KALE BEET

Large Ribbed White. Sometimes called Spinach Beet. Used for greens for chickens by cutting the stem and leaf, which are also very ornamental. It resembles an ornamental beet top, but has no edible root. May be used as a salad. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.25.**

GIANT LUCULLUS, Novelty. A variety with very thick, heavy leaf stems. See page 8.

Our White Swiss Chard has very broad and thick leaf stems. We have a new variety this year the Giant Lucullus. See page 8.

Swiss Chard (White) Beet

Brussels Sprouts Cooper's Selected Aigburth

Many varieties of Brussels Sprouts are shy bearers, and the side buds are ill formed and loose. On this account all market gardeners are looking for a fine, prolific, tight-forming strain. Aigburth is exceptionally prolific and bears fine, even little heads along the entire stem.

Brussels Sprouts Cooper's Selected Aigburth

BROCCOLI

Should be treated the same as cauliflower, which it resembles. In fact it is practically a coarse summer cauliflower, more divided in the head, grows larger and taller and is hardier and easier to grow. Plant and cultivate the same as cabbage or kale.

EARLY LARGE WHITE. The best variety. Heads white and large. **Pkt. 5c; oz. 40c; ¼lb. $1.25; lb. $4.00.**

Purple Cape. Good, large heads, which are tinged with purple. **Pkt. 5c; oz. 35c; ¼ lb. $1.00; lb. $3.50.**

BRUSSELS SPROUTS

The plants are very hardy and grow from two to three feet high, bearing a large mass of leaves at the top. The sides of the main stem are covered with three or four dozen small cabbage heads, which are broken off and cooked the same as cabbage. Sow very early.

AIGBURTH, Cooper's Selected. Our splendid introduction of last year. One of the most highly recommended of the Half Dwarf varieties. This strain is specially selected and runs even in height of plant, and bears uniformly throughout. The side buds are perfectly formed, tight heading little cabbages. **Pkt. 5c; oz. 35c; ¼ lb. $1.00; lb. $3.00.**

IMPROVED HALF DWARF. A well-known variety. Grows two or three feet high and the stem is well covered with small, firm, round sprouts. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

CARDOON

A vegetable with long, cut-edged leaves resembling those of the artichoke. Cultivated for its leaves and stems only, which are much esteemed when cooked. The long leaves must be thoroughly blanched like celery to bring out the delicate flavor possessed by the Cardoon.

Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.25.

CHERVIL

Can be planted any time in the early spring. The leaves should be kept cut, and if not allowed to run to seed, will keep green for a long time. Is more finely curled and handsome than parsley, and makes an excellent plant for garnishing.

Curled. Very finely curled, somewhat resembling parsley and used in same manner. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

CABBAGE

It is difficult to give definite cultural directions for cabbage, since it is possible to have good cabbage at all seasons of the year in some parts of the country, and seed can be planted almost any time of the year. There are three good seasons for sowing the seed, however—in September for late winter and early spring cabbages, in March for summer and fall cabbages, and in June and July for winter cabbages. The seed sprouts quickly, and is likely to come up very thick in the seed bed. It should be thinned early, or the plants become spindling, and then do not head well. Transplanted to the field, they should be put 15 to 18 inches apart, in rows 24 to 30 inches apart. To prevent the heads splitting open in the field before they are ready to be harvested, the plants should be loosened a little at the root. Cabbages require considerable moisture, but too much water causes them to rot very readily.

A Fine Field of Marketable EARLY JERSEY WAKEFIELD Cabbages

EXTRA EARLY VARIETIES

EARLY JERSEY WAKEFIELD One of the best and most popular early varieties. Forms round, pointed heads of good size. Is very hardy and on account of its thick outside leaves is able to resist cold and other unfavorable conditions to a great extent. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

EARLY WINNIGSTADT A decidedly pointed head of good size and fine quality—the most sharply pointed of all cabbages. One of the hardiest varieties; resists cold, wet and insect pest to a degree which makes it very desirable. We recommend it as one of the best early varieties. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

Early Spring. Very early flat-headed variety. Medium sized; good for summer use. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

Large Early Wakefield (Charleston). Is very similar to Early Jersey Wakefield, but nearly a third larger and a little later. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

SECOND EARLY VARIETIES

ALLHEAD EARLY. Probably the earliest of the large, flat-headed varieties. Is good for summer, autumn and winter crop. Desirable for all sorts of planting. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

COPENHAGEN MARKET Undoubtedly an extra fine cabbage for all conditions; grand for market growing and unequalled for home gardening. Its heading qualities are sure, quality the best. This new and fine cabbage is well worth the extra price asked for it, for it is early and every head perfect. Morse's stock is the finest there is, direct from the originator. **Pkt. 10c; ½ oz. 25c; oz. 45c; 2 ozs. 75c; ¼ lb. $1.35; lb. $4.50.**

EARLY DRUMHEAD. Second early; round, flat heads. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

Early Dwarf Flat Dutch. A good flat-headed variety, with short stem and hard, firm head. Forms heads early; is valuable for summer. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

Pottler's Brunswick. One of the most popular of the flat-headed types, especially with the home gardener. Best for fall and winter. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

GLORY OF ENKHUIZEN. This is one of the best of the second early varieties. The heads are very solid, almost globular in shape, and of large size. The outside leaves are not numerous and the whole plant has the appearance of being "all head." **Pkt. 5c; oz. 35c; ¼ lb. $1.00; lb. $3.50.**

Henderson's Succession. Is about ten days later than Early Summer. Is a dwarf, flat head, light-green, and very solid. **Pkt. 5c; oz. 30c; ¼ lb. 90c; lb. $3.00.**

CABBAGE—Continued

Early Winnigstadt Cabbage

Henderson's Early Summer Cabbage

Henderson's Early Summer. A desirable, medium sized, early, flat-headed variety. A good keeper and does well in summer and autumn. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

MORSE'S SELECTED EARLY FLAT DUTCH

An early hard-heading cabbage of bright turquoise green. Morse's Strain has been selected for its sure-heading qualities and for its earliness. **Pkt. 5c; oz. 35c; ¼ lb. $1.00; lb. $3.50.**

WINTER VARIETIES

Autumn King, or Worldbeater. A beautiful winter variety of vigorous growth and extra large. Solid heads of bluish-green. **Pkt. 5c; oz. 30c; ¼ lb. 90c; lb. $3.00.**

Burpee's Surehead. One of the best varieties. Large, round, slightly flattened head; hard and firm. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

DANISH BALL HEAD OR THE HOLLANDER

A very late variety, forming globular heads; very hard and solid. Keeps well and is a good shipper. The color is bluish-green. **Pkt. 5c; oz. 35c; ¼ lb. $1.00; lb. $3.30.**

DANISH ROUND HEAD. A short-stemmed "Danish Ball Head," having all the good qualities of its progenitor and being nearly two weeks earlier; a main crop variety. **Pkt. 10c; oz. 35c; ¼ lb. $1.05; lb. $3.50.**

Premium Flat Dutch. A well-known, large, late variety. Flattish round heads, very solid and firm; has rather tall, stout stem. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.25.**

We carry Cabbage Plants at various seasons. See list on page 43.

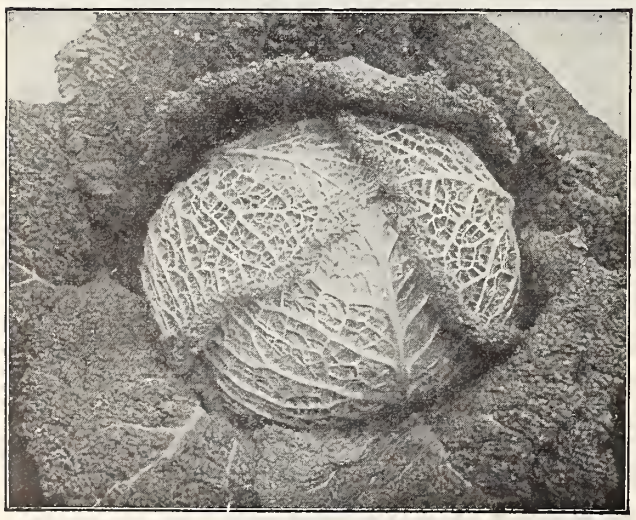
SAVOY CABBAGE

Perfection Drumhead Savoy. A variety that is much prized in Europe and also by those who are familiar with it in this country. It is very sweet and crisp, and always tender. Heads medium sized and fairly compact. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

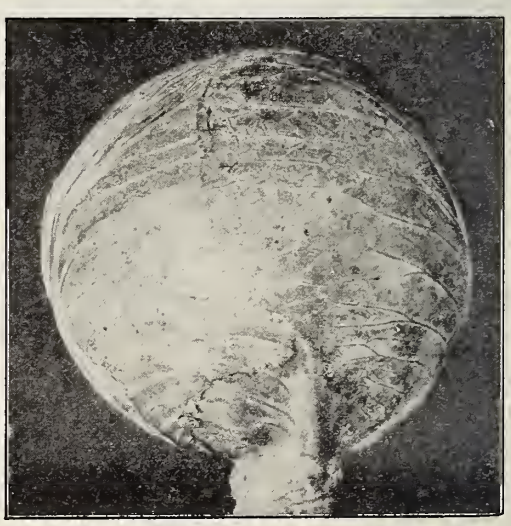
RED CABBAGE

Mammoth Rock Red. Best hard-headed red variety. Large heads, globular; very solid and very deep red on top. Outer leaves greenish-red, large and spreading. Especially used for pickling and preferred by many. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.25.**

Chinese Cabbage. See Wong Bok, on page 8.



Perfection Drumhead Savoy



Danish Ball-Head Cabbage

CARROTS FOR TABLE AND STOCK

Good, sandy loam is best adapted for carrots of all varieties. The shorter varieties, however, can be sown on heavier lands, with good results. For garden, sow the early and short varieties at any time after January 1st. For general crop sow in the open field about April 1st, using two or three pounds per acre for rows sixteen to eighteen inches apart. While you get a good uniform root by thinning the young plants, it is not necessary to do so to get a crop of good, average carrots.

Chantenay, or Model. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

DANVER'S HALF-LONG The best variety for general purposes and the most largely used, not only for stock raising, but for table use as well. The perfect type is about eight inches long and about two and a half inches wide at the shoulder, tapering to a sort of half-point at the bottom. Color is a bright orange-scarlet. It is a very heavy cropper. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.25.**

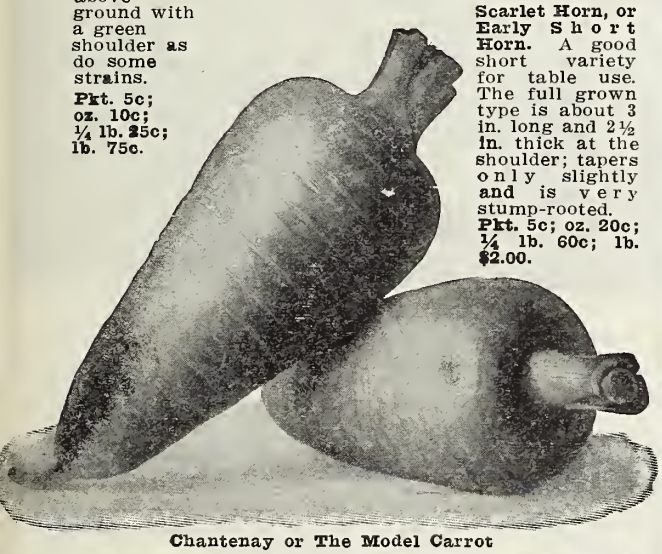
French Forcing. A very popular variety for forcing. Root is globe-shaped, with distinct tap root. Color bright orange scarlet. **Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. $1.60.**

Half-Long Scarlet Stump-Rooted. A variety about as long as Danver's, but not so thick. It is of uniform thickness from shoulder to root, and very stump-rooted. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $1.75.**

IMPROVED SHORT WHITE. The most popular of all white varieties, being a heavy cropper and of a desirable shape to allow easy digging in heavy soils. The true type is very thick in the middle and should not taper abruptly from the shoulder. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Large White Belgian. The best known and one of the oldest white varieties—is a long-pointed root, and should only be planted on light soils where roots are fairly easy to dig. The variety we offer does not grow above ground with a green shoulder as do some strains. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Scarlet Horn, or Early Short Horn. A good short variety for table use. The full grown type is about 3 in. long and 2½ in. thick at the shoulder; tapers only slightly and is very stump-rooted. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $2.00.**



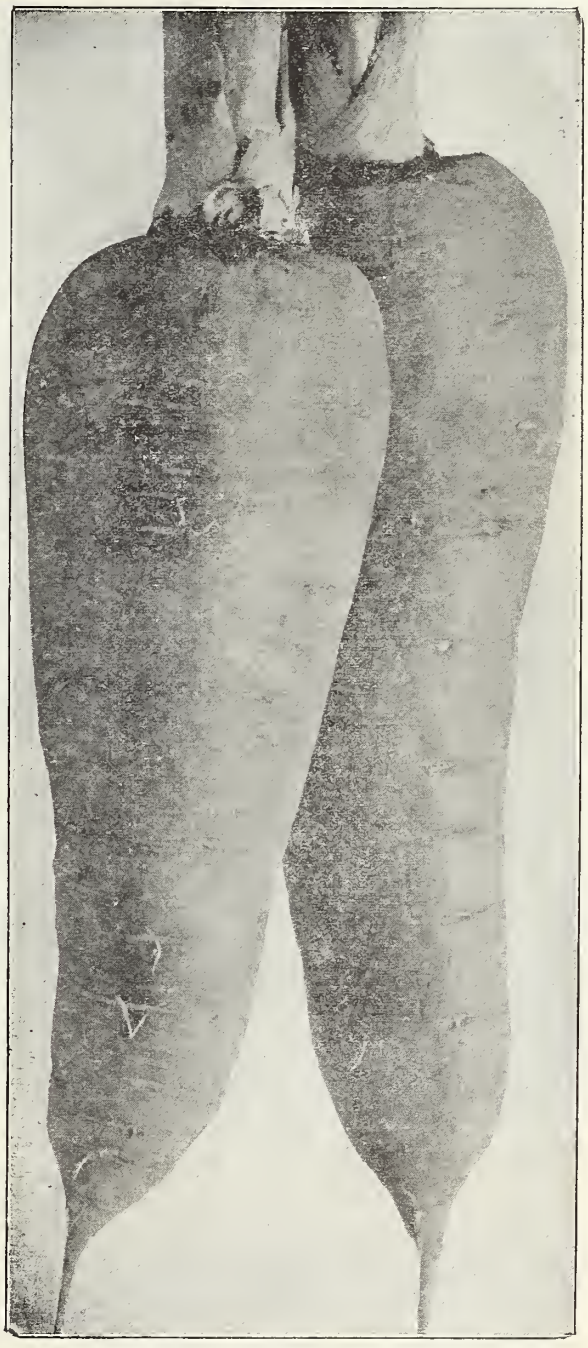
Chantenay or The Model Carrot

LONG ORANGE The best long variety, and a good, heavy cropper for light soils where roots can be easily dug. The strain we offer is a bright orange-scarlet, and fairly thick, and grows entirely under ground, having no green shoulders. Has the brightest color of all the red carrots. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.25.**

Morse's Orange Ice. Especially crisp and brittle; coreless; 8 inches long, stump root. Extra fine quality. **Pkt. 10c; oz. 30c; ¼ lb. 90c; lb. $3.00.**

OXHEART OR GUERANDE One of the most popular and best croppers among the short carrots. The shape is particularly desirable for heavy soils. The true type is about 4½ inches long and 3½ inches thick at the shoulder. It tapers slightly to the bottom, and is very stump-rooted. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.25.**

Red Saint Valery, or New Intermediate. A little longer than Danver's, tapering abruptly, with pointed root. A very desirable, long variety and rather preferable to Long Color bright orange-scarlet. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.25.**



Danver's Half-Long Carrot

CHIVES

A plant resembling a tuft of grass, but the leaves have the flavor of onions. The leaves are used in soups and salads, giving a mild onion flavor to same. **Pkt. 10c; oz. 75c.** See plants of chives listed under vegetable plants, page 49.

CAULIFLOWER

The culture of cauliflower is much the same as that of cabbage. It does not make a good summer crop, however, as it will not head up well in hot weather. It is especially popular as a fall and winter crop, and with market gardeners proves a profitable crop, owing to the scarcity of good market vegetables when cauliflower is at its best. It is easy to grow in the garden, providing the soil is made rich and porous. The young plants should be thinned, since they become very spindling if allowed to grow too thick. Set in 24-inch rows, 14 inches apart.

Algiers. One of the best late varieties, forming good, large white heads, inclosed in long broad leaves, late in the fall. **Pkt. 10c; ¼ oz. 25c; oz. 75c; ¼ lb. $2.50.**

CALIFORNIA WONDER

The Cauliflower which does well in this climate, always heading with large solid heads. Leaves large and long and may be tied over the head for protection. Late and of fine quality. **Pkt. 10c; ¼ oz. 25c; oz. 75c; ¼ lb. $2.50.**

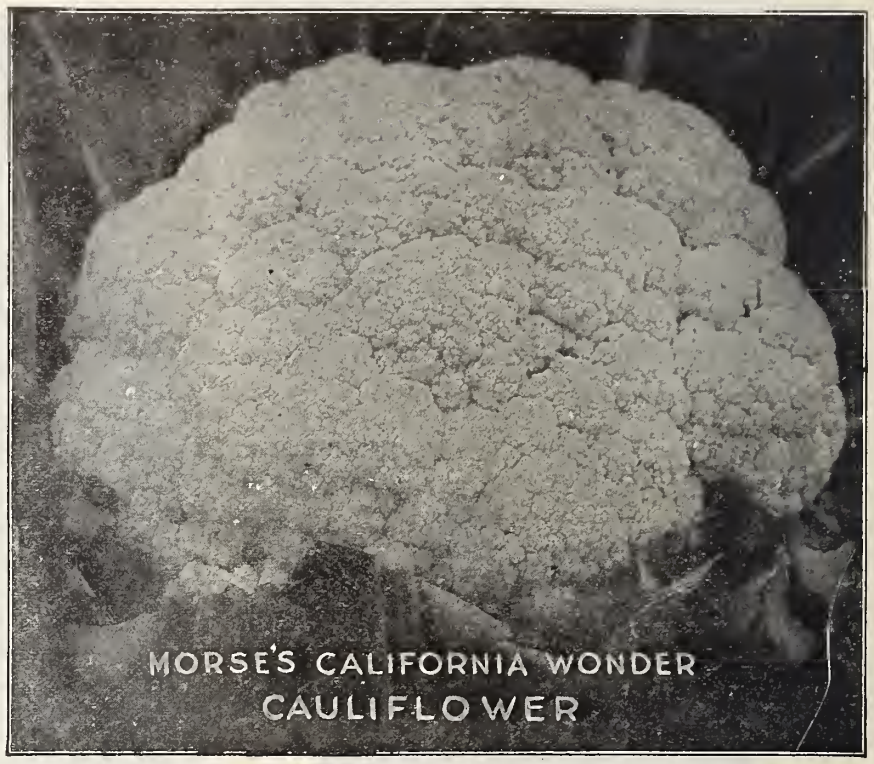
Dry Weather. A strain of the Early Snowball type, which is especially adapted to California. **Pkt. 20c; ¼ oz. 75c; oz. $2.50; ¼ lb. $8.00.**

Early Favorite. A hard-heading variety. It is quite hardy and a good market variety. Medium late. **Pkt. 5c; ¼ oz. 35c; oz. $1.00; ¼ lb. $2.50.**

EARLY SNOWBALL

The best and most popular early variety grown. There is a vast difference in the strains of this variety offered, but what we offer is the best imported stock. Those who have had trouble with cauliflower should try this Snowball. It will make uniformly fine heads even under adverse conditions. **Pkt. 25c; ¼ oz. 70c; oz. $2.25; ¼ lb. $8.00.**

Snowball. An early variety with short leaves and fine white heads. About a week later than Early Snowball and preferable in most of California. **Pkt. 5c; oz. $1.50; ¼ lb. $4.50.**



Extra Early Dwarf Erfurt. Is very early and almost as good as the best quality of Snowball. **Pkt. 20c; ¼ oz. 60c; oz. $2.00; ¼ lb. $7.00.**

Extra Early Paris. A hardy variety quite easy to grow and forming good heads. This is between the extra early sorts and the late varieties in type. Is medium late. **Pkt. 10c; ¼ oz. 25c; oz. 75c; ¼ lb. $2.50.**

Veitch's Autumn Giant. A large late variety, very hardy, but especially desirable for the South. The large leaves protect the heads well making this a fine variety for California. **Pkt. 5c; ¼ oz. 15c; oz. 50c; ¼ lb. $1.50.**

CHICORY

Used as a substitute for coffee when the roots are dried out and ground. The roots are also used for cooking and are very palatable. Sow early in the spring in 18-inch rows, thin the young plants to six inches and keep well hoed. The plant spreads from the root and is perennial.

Large Rooted, or Coffee. The largest rooted variety. **Pkt. 5c; oz. 25c; ¼ lb. 75c.**

Small Rooted, or Radicchetta. This is the best variety for using as a salad, it being very tender and light green; a great favorite with Italian people, the plant making very small roots and large tops which can be cut repeatedly. **Pkt. 5c; oz. 30c; ¼ lb. 90c.**

Whitloof. A delicious winter salad, eaten usually with French dressing like cos lettuce. The root is long like a parsnip, but the part eaten is the top of the root, with the young leaves, usually best when forced in the winter. Seed should be sown in June, in drills 10 inches apart; allow plants to grow until November, when they should be taken up, trimmed to 1½ inches from the neck, leaving about 8 inches, then planted upright, 1½ inches apart, in trench 16 inches deep. Fill trench with good soil, and for quick growth cover with manure. In about four weeks it will be ready for use, and is eaten either raw or cooked. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

COLLARDS

A plant bearing a large mass of leaves on the top of a stout stalk. It is a species of cabbage, and the flavor is the same. It bears leaves all through the winter, and is used especially in the South for cabbage greens. Young plants may be started in boxes in early spring, and the young plants transplanted, allowing plenty of room for each plant. Set 14x18 inches.

TRUE GEORGIA. Grows from four to five feet high and forms a very large, loose head. Leaves are tinged with purple. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

CORN SALAD OR FETTICUS

A salad plant used as a substitute for lettuce in salads, or may be cooked like spinach for greens. It does well in winter and spring. On rich soil the leaves grow quickly and are exceedingly tender. **Large Leaved.** Very tender leaves, which grow out rapidly after being cut. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 75c.**

CELERIAC OR TURNIP ROOTED CELERY

Grown for the edible root and not for greens. Start seed like celery and transplant to garden.

Giant Smooth Prague. Celeriac forms a good, thick root, as much as four inches in diameter, and nearly globular. Makes a most delicious flavored salad. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $1.75.**

Complete Vegetable Planting Table and full Cultural Directions given on pages 50 and 51.

CELERY

Giant Pascal at the left; White Plume in the center. Notice the difference in color; 40,000 plants. Individual plant is White Plume. Our stock of this is superb.

From a letter received from Joseph Imwalle, leading Market Gardener and Vegetable Grower of Santa Rosa, Cal.:

November 9, 1916.

C. C. Morse & Co., San Francisco.

Dear Sirs: I have been raising celery for the last thirty years but never raised such a crop as this until I purchased my seed from C. C. Morse & Co., and I have since found your seed reliable and true to name. Every seed I sowed come up, and in a short time I had twenty thousand White Plume Celery and twenty thousand Winter Queen Celery. Every bunch tall and beautiful and of a uniform size.

Yours truly, JOS. IMWALLE.

Celery requires water, and lots of it, from the time the seed is sown in boxes in March until it is pulled in the autumn or winter. The seed is slow to germinate, and the soil where it is planted needs to be kept very wet. As soon as the young plants are about one and one-half inches high, they should be transplanted to get good, sturdy plants before they are finally set in the garden or field. When the plants begin to grow vigorously the soil needs to be drawn up around the plants, first tying them at the top or wrapping with a piece of sacking to prevent the earth getting between the stems. As fast as the plants grow above the soil, the earth wants to be hilled around them again to get a full growth of well-blanched stems. The great celery growing centers are located in swampy, peat districts. Use one ounce of seed to 15,000 plants, or two ounces per acre. Set in 24-inch to 30-inch rows.

COLUMBIA. A very fine variety for home market and private gardens. The stalks are very thick and almost round. It blanches to almost a golden yellow and the foliage is light green, blanching to quite a yellow tint. It has a decidedly nutty flavor, of very superior quality. **Pkt. 5c; oz. 40c; ¼ lb. $1.60; lb. $4.00.**

GOLDEN SELF-BLANCHING—PARIS GOLDEN

The best market variety, especially for early crop. The plant is naturally golden-yellow (both stem and leaves), but needs to be blanched to make it brittle and fit for table use. Forms a rather small bunch. **French grown. Pkt. 10c; oz. $1.50; ¼ lb. $5.00; lb. $18.00.**

California Grown. Oz. 75c; ¼ lb. $2.25; lb. $7.50.

Giant Golden Heart. Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.

Dwarf Golden Heart. Rather tall, forming a large bunch and blanching white and crisp. Is hardy and a good shipper. **Pkt. 5c; oz. 20c; ¼ lb. 75c; lb. $2.50.**

Giant Pascal. Rather tall, with stems near-round, and when blanched is white, brittle and especially good flavor. **Pkt. 5c; oz. 20c; ¼ lb. 75c; lb. $2.50.**

WHITE PLUME

A comparatively easy variety to grow, as it is fairly hardy, and, being naturally white, is easy to blanch. The leaves are also white, tinted with green at tips. Forms a medium sized bunch and is fairly tall; early. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

WINTER QUEEN. Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.

Celery Seed for Flavoring (Soup Celery). ½ lb. 40c; lb. 70c.

CORN

Sweet or Table Varieties

Stowell's Evergreen Sweet Corn

As corn is very sensitive to frost, it cannot be planted with any degree of safety until about the middle of April, except in sections that are notably free from late frost. Moist, rich soil is best for corn, and frequent hoeing or cultivating improves it. The small, but rich, mountain valleys seem especially favorable for good table corn.

In cutting corn for the table it is important that it be picked at just the right time, especially when not too old. Frequent small plantings of the several varieties in succession will keep a good supply available for the table all summer. Plant in hills three feet each way, and often four feet is better, and even five feet for some varieties. Do not let the plants overcrowd. Sow 15 lbs. per acre.

Try the following recipe for corn, and discover how delicious this vegetable really is. Corn direct from the garden is actually sweeter than if allowed to wait.

In cooking corn, use boiling water; do not cover the vessel and do not cook more than ten minutes. Use no salt. A pinch of sugar will add to the natural sweetness.

Unfavorable reports on account of weather conditions are now coming in from the corn district. Prices are subject to rise without notice. Write for all prices by the 100 lbs., as we are not able to make them at the time of going to press.

Black Mexican. One of the best medium early varieties. Although when ripe the seed is dark bluish or black, when ready for table use it is white. It is of especially fine sweet flavor and very tender. The cobs have 10 rows of kernels and the variety fills well. **Pkt. 10c; lb. 20c; 10 lbs. $1.50.**

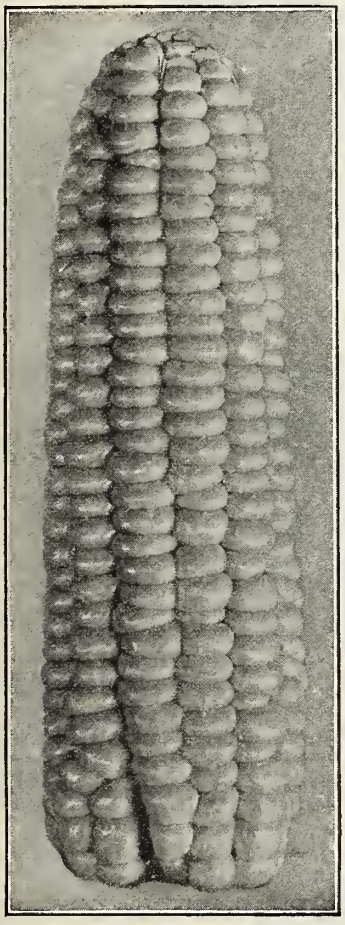
GOLDEN BANTAM. A very early variety. The ears are but medium size, but are thickly set with delicious yellow kernels. The quality of this variety is superb, and it has become a general favorite early sweet corn with all who have tried it. Golden Bantam and Golden Cream have a flavor distinct from other sorts, and if you have never tried these two sorts from your own garden you must plant them this year. Never mind if the color is yellow, the color so often associated with field corns, the rich nut-quality is here. **Pkt. 10c; lb. 20c; 10 lbs. $1.50.**

CROSBY'S EARLY A fine, early variety, growing about four feet in height. Kernels smaller than on Red Cob Cory, having 14 rows to each ear, while the Cory varieties have eight rows. This makes a better and finer table corn. In time is later, perhaps two weeks later than Reb Cob Cory. Resists the corn-ear worm well. **Pkt. 10c; lb. 20c; 10 lbs. $1.50.**

MORSE'S GOLDEN CREAM The flavor of Morse's Golden Cream is rich, nut-like and delicious, and better than other corns. It is good enough to eat raw. Morse's Golden Cream is early, prolific and a fine sort; seed yellow. **Pkt. 10c; lb. 35c, postpaid; lb. 25c; 10 lbs. $2.00.**

CORN

Sweet or Table Varieties—Continued



Early Red Cob Cory Corn

COUNTRY GENTLEMAN OR SHOE PEG

One of the best of the late varieties. Has a long white cob, closely filled with long small "shoe peg" kernels. Is remarkably fine flavored and sweet, and is frequently used by canners. Many people consider Country Gentleman as about the best of the late corns, and certainly is of the very highest merit. The stalk is tall. Plant other sorts for early and this for late. **Pkt. 10c; lb. 25c; 10 lbs. $2.00.**

EARLY RED COB CORY. One of the best extra early varieties. Ears are about six inches long and eight-rowed and well filled. This variety does especially well in the Coast counties. We have customers who will not plant any other sweet corn than Red Cob Cory. **Pkt. 10c; lb. 20c; 10 lbs. $1.50.**

EARLY MINNESOTA

Between Crosby's and Cory's in earliness. Stalks about five feet high; ears long and eight-rowed. **Pkt. 10c; lb. 20c; 10 lbs. $1.50.**

Early White Cob Cory. An extra early variety with remarkably white grains, especially when cooked. Ears are six to seven inches long. Kernels are large and placed in eight rows to each ear. If you are badly troubled by the corn-ear worm, try this variety. **Pkt. 10c; lb. 20c; 10 lbs. $1.50; 100 lbs. $9.50.**

White Evergreen. Like Stowell's Evergreen, only snow white. **Pkt. 10c; lb. 20c; 10 lbs. $1.50.**

EARLY MAMMOTH OR ALAMEDA

This sort is very largely grown in Alameda county. The ears are long and very large, and well filled with 10 to 14 rows. The variety is medium early and of fair quality. **Pkt. 10c; lb. 20c; 10 lbs. $1.50.**

Late Mammoth. A mammoth variety, with very long, thick ears, which are covered with very wide, thick kernels. Has the largest ears of any variety. Is very late. **Pkt. 10c; lb. 25c; 10 lbs. $1.75.**

Moore's Early Concord. A medium early variety. Ears are rather short and well filled with 14 to 16 rows of kernels. A good variety for private garden or for canning. **Pkt. 10c; lb. 20c; 10 lbs. $1.50.**

Old Colony. A very fine late corn and worthy of a place in the garden; sweet flavor and small kernels; 16 to 20 rows. **Pkt. 10c; lb. 20c; 10 lbs. $1.50.**

STABLER'S EARLY

We recommend this as the finest small kerneled early sweet corn. Medium sized, prolific, white kernels, like pearly teeth; 14 rows to the ear. The kind of sweet corn which one most likes because the kernels are small and the skin white and tender. An excellent table sort. **Pkt. 10c; lb. 20c; 10 lbs. $1.50.**

STOWELL'S EVERGREEN

The most popular and best main crop variety, and a good all-round table variety. Of good, strong growth, about six feet high. Ears keep in condition for boiling for a remarkably long time. The quality is excellent. Stowell's Evergreen is a late sweet corn, taking a good time to mature; 12 rows to the ear; kernels long and meaty and of fine quality. Stowell's Evergreen is largely used as a fodder corn on account of its succulent stalks. **Pkt. 10c; lb. 25c; 10 lbs. $2.00.**

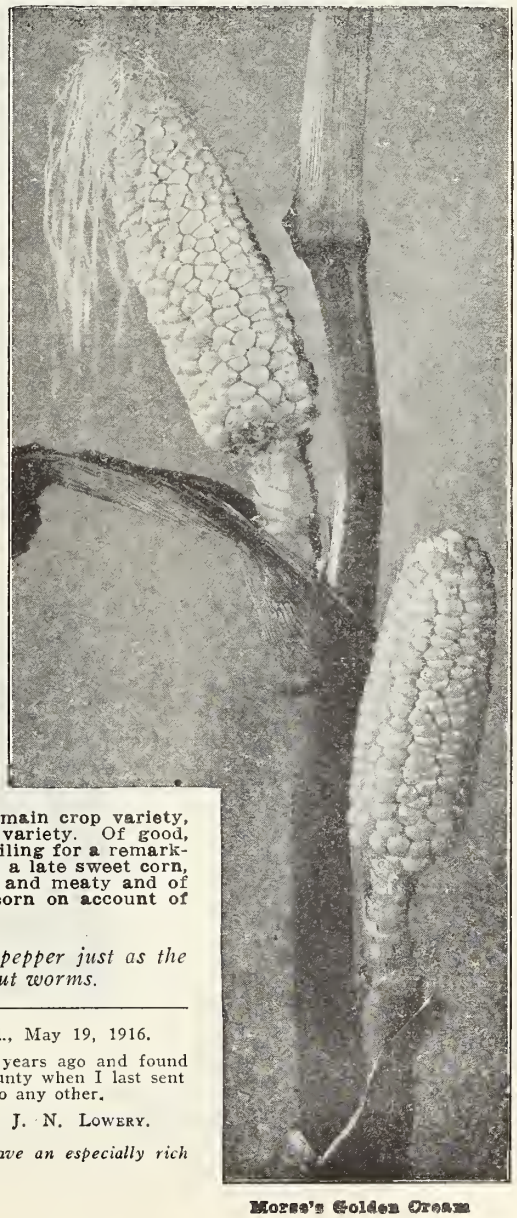
To prevent worms in the ear, sprinkle a pinch of red cayenne pepper just as the silk appears and repeat a few days later. This will effectively keep out worms.

Aromas, Cal., May 19, 1916.

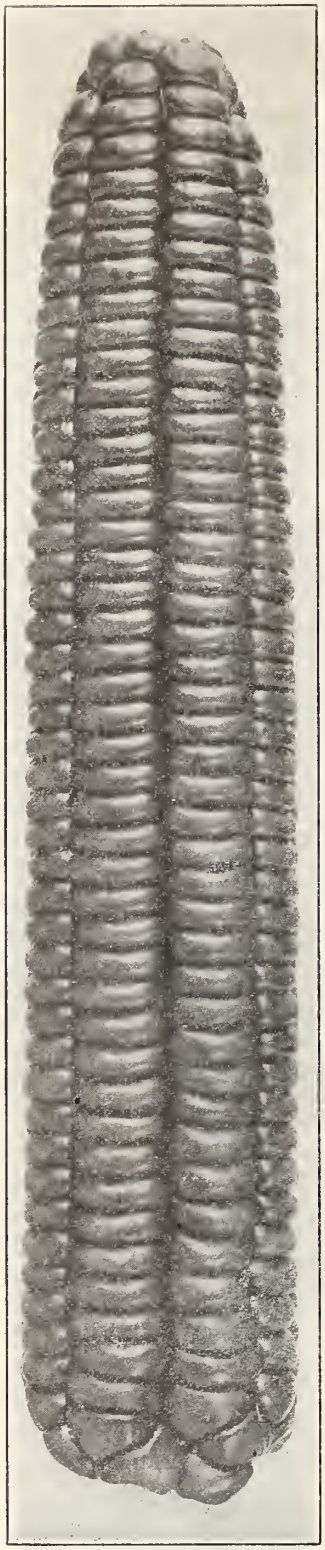
I want some more of your Golden Cream Sweet Corn. We tried it two years ago and found it the best we have ever tried for the table and for drying. I was in Glenn county when I last sent to you for seeds. The Copenhagen Market Cabbage also proved to be superior to any other.

J. N. Lowery.

This is what we claim, that Morse's Golden Cream and Golden Bantam have an especially rich and delicious flavor.



Morse's Golden Cream



Morse's Hybrid Yellow Flint Corn

FIELD CORN

STANFORD YELLOW DENT CORN. An excellent strain of acclimated Dent Field Corn produced on the famous Stanford Vina Ranch, under the personal supervision of Mr. W. G. Stimmel, manager, who had in mind the development of a corn which, under proper cultural conditions, would be a sure crop in the interior valleys of California. We are offering this splendid corn to the public again this year, with the added enthusiasm born of actual results, obtained during the past season; space does not permit of printing even one of the many letters from satisfied customers. Unfortunately the supply of seed last season was not sufficient to take care of the orders received. We have arranged for larger supplies this year; at the same time we would caution prospective planters to order early, so as to avoid disappointment. We have not spared expense in preparing seed of uniform quality. **Per lb. 20c; 10 lbs. $1.25; 100 lbs. $7.50.**

MORSE'S HYBRID YELLOW FLINT CORN. A cross of two well-known varieties that has developed an ensilage corn of sterling merit. The illustration shown herewith, sent us unsolicited by one of our customers, accompanied by the few words of commendation, is the best evidence of the adaptability of this corn to California conditions. Our seed has been specially selected for seed purposes, according to the best standards of quality. **Per lb. 15c; 10 lbs. $1.00; 100 lbs. $5.00.**

Extra Early Adams. The earliest of all corn and the first to make ears. Plant dwarf and stocky and grains of fair quality. **Pkt. 10c; lb. 15c; 10 lbs. $1.25; 100 lbs. $7.00.**

Early Adams. Although not a sweet corn, can often be used as such on account of its fine, white kernels, which are quite sweet and tender. Is very hardy and can be planted earlier than the early varieties of sweet corn. **Pkt. 10c; lb. 15c; 10 lbs. $1.25; 100 lbs. $7.00.**

Early Eight-Rowed Canada, also known as the **Yellow Flint.** A rapid growing, early variety, and for this reason largely used for replanting. Very valuable where the seasons are short. **Lb. 15c; 10 lbs. $1.00; 100 lbs. $5.00.**

King Philip. An old New England favorite. The ears are long and the variety is very early; copper red in color. **Lb. 15c; 10 lbs. $1.15; 100 lbs. $5.00.**

Early Golden Dent, or Pride of the North. A very early Dent variety, and especially valuable on account of its extreme earliness. Deep yellow grains. **Lb. 15c; 10 lbs. $1.00; 100 lbs. $5.00.**

LEAMING A very popular, tall growing variety. Is early, stalks are leafy, making excellent fodder. Kernels are long and deep golden yellow. **Lb. 15c; 10 lbs. $1.00; 100 lbs. $5.00.**

White Cap Yellow Dent. An early and hardy variety, growing six to seven feet in height. Ears are 8 to 10 inches in length. **Lb. 15c; 10 lbs. $1.00; 100 lbs. $5.00.**

SANFORD WHITE FLINT An early, tall variety, bearing large ears which are well filled with long, pure white kernels. **Lb. 15c; 10 lbs. $1.00; 100 lbs. $5.00.**

Wisconsin White Dent. A tall-growing variety; large eared; 16 to 18 rowed; grains large and white. **Lb. 15c; 10 lbs. $1.00; 100 lbs. $5.00.**

POPCORN, WHITE RICE The most popular variety; very prolific; ears short, kernels long, resembling rice in shape; color white. **Lb. 15c; 10 lbs. $1.25.**

Kaffir Corn, Broom Corn, Egyptian Corn, Jerusalem Corn—See **Field Seeds.** Page 58.

Photo of Mr. Fox, who is 6 feet 2 inches tall, in his field of Morse's Hybrid Yellow Flint Corn.

Office of CENTRAL CREAMERY,
12th and Jefferson Sts., Oakland, Cal.
C. C. Morse & Co., San Francisco, Cal.

GENTLEMEN: The Morse's Hybrid Flint Corn which I bought from you last spring has done wonderfully well, as you will see by the enclosed photograph. It grew to twelve feet high and stooled out well, making it the heaviest crop for ensilage ever harvested in this section. I planted forty acres and consider the crop in the silo worth over $8,000 in green feed. Yours truly,

E. H. FOX, Mgr. Central Creamery Ranch, Knightsen, Cal.

Morse's CUCUMBERS

Cucumbers are sensitive to frost, and cannot be planted until the last of April. They require a great deal of water, and unless planted on very wet soil, will require frequent irrigation throughout the summer. Plant in hills four feet each way, dropping about twelve seeds in each hill. Later, when plants are well started, thin out, leaving only four or five of the strongest plants to each hill. Sow one-half inch deep. The soil should be made very rich with well-rotted stable manure, well spaded in.

Cucumbers are very easy to grow, and a few hills will produce an abundance for an average family. The Cucumbers should be gathered when large enough for use, whether required or not; if left to ripen, it destroys their productiveness. For pickles, plant from June until the middle of July.

MORSE'S ARLINGTON WHITE SPINE When you see this in your garden you will agree that we have here a selection that is a perfect cucumber. It is dark green in color, very straight and even in shape. Morse's White Spine is 7 to 8 inches long, is early and can be forced, and also is a most excellent garden cucumber. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 90c.**

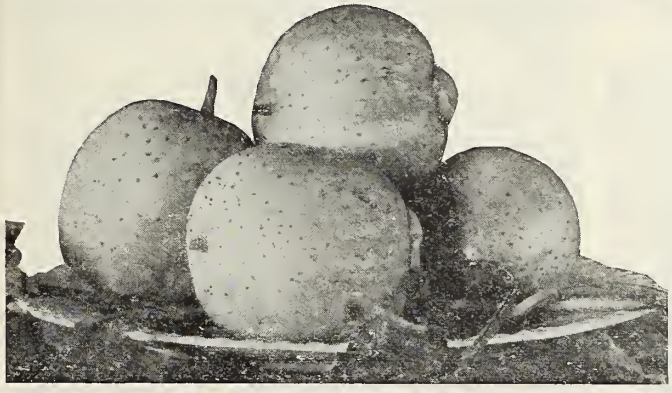
Klondyke Cucumber

Chicago Pickling. Is the most popular pickle variety in use about Chicago. Medium sized, dark green. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 90c.**

Cool and Crisp. A fine garden cucumber, deep green and crisp. Is of the White Spine type, pure white when ripe. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Evergreen White Spine. A popular variety, having long, rich dark-green fruits with very tender, white and crisp flesh. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 95c.**

KLONDYKE. A White Spine variety, very dark green when young, and medium early. It maintains its dark green color longer than other White Spine varieties and runs uniform in size and shape. It is very popular as a shipping variety. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**



Lemon Cucumber

Wild Cucumber. A vine grown only for ornamental purposes. See Flower Seed List under Echinocystis.

Early Cluster. A very productive variety, bearing its fruit in clusters of two or three. The fruit is short and very dark green. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 90c.**

Early Short Green, or Early Frame. A very desirable variety for either pickling or table use. Fruit straight, small at each end; bright green. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Everbearing. Very early and very prolific. Fruits four to six inches long, quite thick and blunt at the ends, and of a rich dark-green color. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Extra Early Green Prolific, or Boston Pickling. A very prolific variety, used principally for pickles. Fruit medium sized, bright green; very even and symmetrical. Gather the fruit when small and it will bear all summer. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Fordhook Famous. A long White Spine variety. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

Gherkin, or West India Gherkin. An extremely small fruited variety, grown exclusively for pickles. It has no value for slicing. Is very prickly, but tender and crisp if picked when young. Seed germinates slowly. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

Japanese Climbing. A good variety for training to a trellis. Forms long fruit of rich, dark-green color. The flesh is white, crisp and of good flavor. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.50.**

LONG GREEN The skin is of a deep green, and the flesh is solid, crisp and of fine quality. We have the very best strains of this variety and recommend it as much the best cucumber of all, and the variety everyone should plant. The best known and most popular variety for general use. Is vigorous and productive, and forms fruit fit for use almost as early as the shorter varieties. The mature fruit is almost 12 inches long. **Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. $1.25.**

LEMON. A cucumber which you can eat fresh from the garden like a radish is a novelty. Lemon Cucumbers are little, round and delicious. They are eaten just that way. **Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. $2.00.**

Telegraph Rollinson's: English Greenhouse Variety. These cucumbers are quite different from the ordinary sorts. They have very few seeds and very long, slender fruits, which are perfectly straight when grown suspended from vines in a greenhouse. Very few seeds to a packet, but all are carefully saved from English greenhouses from the finest strain only. **Pkt. 25c.**

THREE MOST VALUABLE BOOKS FOR CALIFORNIA

THE CALIFORNIA FRUITS AND HOW TO GROW THEM
Price $3.00; postpaid to Pacific Coast, $3.15

THE CALIFORNIA VEGETABLES IN GARDEN AND FIELD
Price $2.00; postpaid to Pacific Coast, $2.15

CALIFORNIA GARDEN-FLOWERS, SHRUBS, TREES AND VINES
Price $1.50; postpaid to Pacific Coast, $1.60

THESE three books are standard and authentic works on these subjects of fruit growing, vegetable raising, and general flower gardening about the home. Written by Prof. Edw. J. Wickson—one who knows California conditions thoroughly.

CRESS

There are two species of cress, as noted below. The first named should be sown in drills about 16 inches apart in rich ground, early in spring. Several sowings should be made at intervals to secure a succession. Watercress should be sowed along the banks of running water where there is good soil, and after the seed is up it needs no further cultivation, since the plants spread over the water and make a mass of fine, edible leaves.

Fine Curled (Pepper Grass). Leaves finely cut or curled like parsley. The leaves are pungent and are used to mix with lettuce. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.**

True Water. Forms a plant the leaves of which are used for salad or for garnishing. Thrives only when the roots and stems are submerged in water. **Pkt. 10c; oz. 35c; ¼ lb. $1.00; lb. $3.50.**

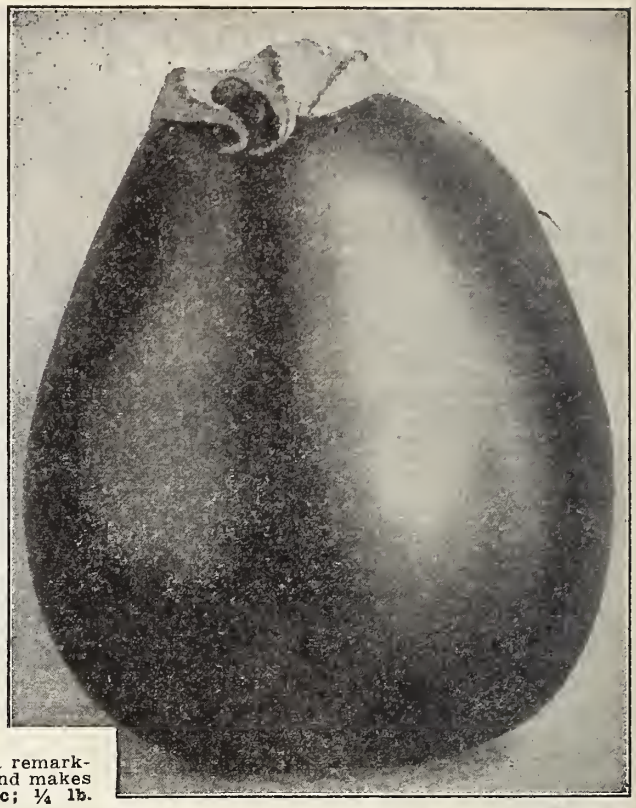
DANDELION

An early grown plant, now much esteemed for greens, which are cooked like mustard and spinach. Sow the seed in May or June on good, rich soil, and thoroughly cultivate, when the leaves will be ready to cut the following spring. An ounce will sow 200 feet of row.

Improved Large Leaved. The largest leaved and best cutting variety. **Pkt. 10c; oz. 50c; ¼ lb. $1.55.**

EGGPLANT

The seed germinates slowly and should be started under glass, with moderately high temperature, about March 1st. When about 3 inches high, transplant carefully to the garden or field, but not until all danger of frost is over. Eggplant does not do so well where cool nights prevail as in places where the nights are warm. It needs a warm climate to insure quick and uninterrupted growth.



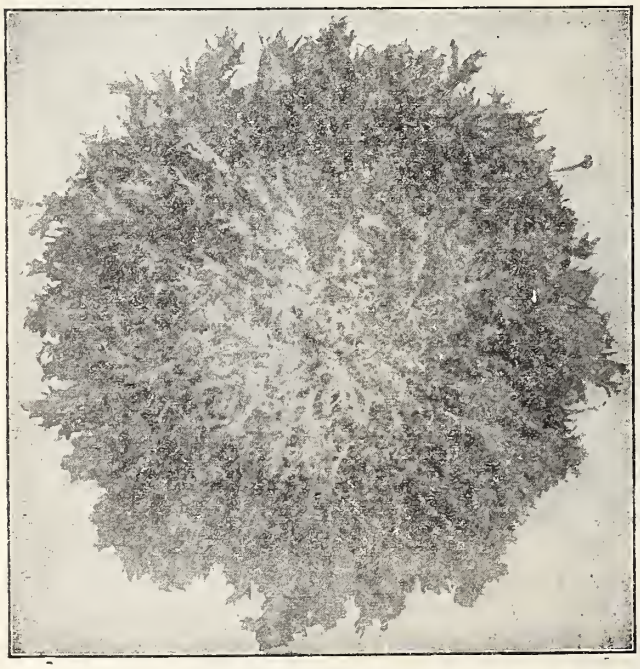
Black Beauty Eggplant

This is the earliest of the large fruited Egg Plants.

BLACK BEAUTY Rich purple black in color and a remarkable market variety. Is early and makes also a fine sort for the home garden. **Pkt. 10c; oz. 50c; ¼ lb. $1.50; lb. $5.00.**

Early Long Purple. An early variety and also a very profitable one. The fruit is long and thin and of a rich dark purple. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

NEW YORK IMPROVED LARGE PURPLE The principal market variety; plants are large and spreading; fruit large and of deep rich purple. **Pkt. 10c; oz. 40c; ¼ lb. $1.20; lb. $4.00.**



Green Curled Endive

ENDIVE

A salad vegetable which is becoming very valuable for winter use. The seed should be sown in June or July in 18-inch rows, and thinned to about six inches apart. When quite well grown the outer leaves should be tied, thus blanching the inner leaves and the heart. It is hardly palatable until after frost, being rather bitter if used in summer.

BROAD-LEAVED BATAVIAN OR ESCAROLE variety having wide, thick leaves, straight at the edges and curved toward the center. Color dull green. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

GIANT FRINGED. A very large curled variety and very hardy. The curling is medium and the leaves are large and stand well upright in the ground. One of the best market varieties. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

GREEN CURLED Has very curly leaves, the midrib being white and whitish, and the outer edges very much indented and crested. A very attractive plant and one of the very best varieties. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.10.**

White Curled. A light yellowish-green variety; very curly and quite ornamental. A good variety for general use. **Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. $1.50.**

FLORENCE FENNEL

This highly flavored plant has a thickened leaf stem which is grown like celery and is much used in Italian cooking. Served boiled or sliced and cooked in soups. Pkt. 10c; oz. 25c.

KALE, OR BORECOLE

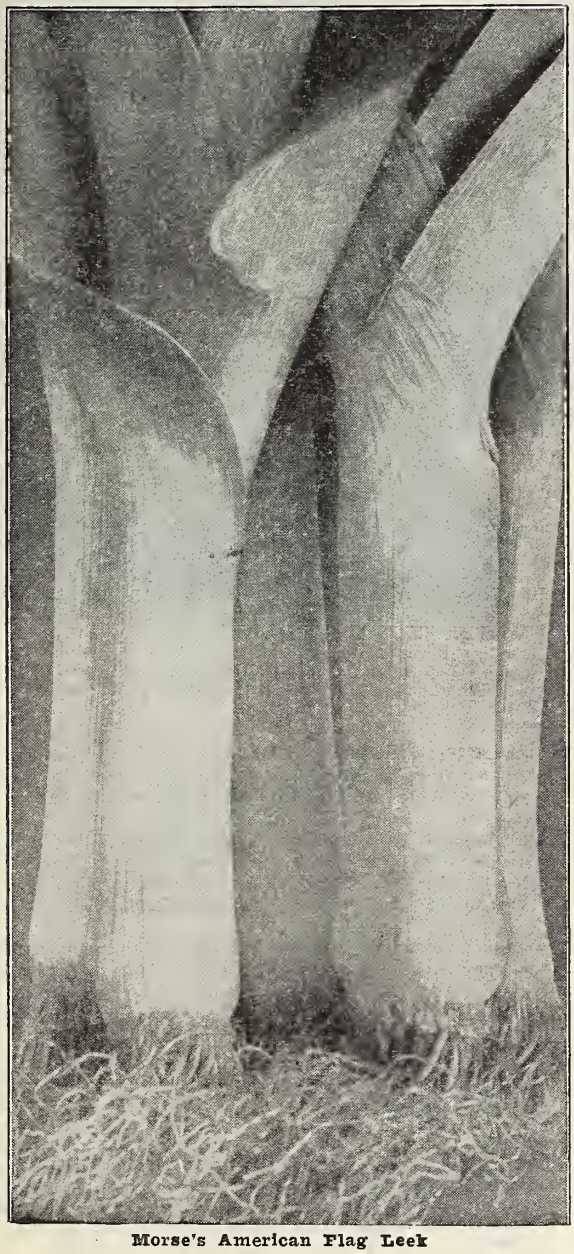
A species of cabbage, forming a mass of leaves, some varieties being very beautiful and curly. The leaves are cooked as greens. The seed should be planted in September, and the plants will be ready to use in the winter. It is hardy and will withstand frost and snow.

DWARF CURLED SCOTCH. The most popular Kale for general use. The leaves are very tender. Color bright green. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 85c.**

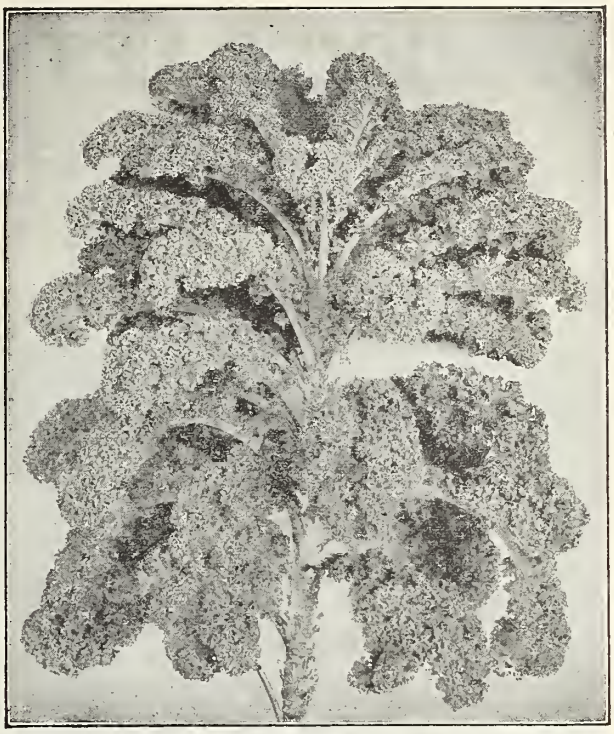
Green Curled Scotch, Tall. Grows about 2½ feet high. Is very curly and makes a beautiful plant. Quality is the best. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 85c.**

Dwarf Purple German. Similar to Dwarf Curled Scotch, excepting the leaves are purple. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

JERSEY KALE OR THOUSAND HEADED A tall variety with smooth leaves. Especially used for feeding chickens. Furnishes lots of green feed. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**



Morse's American Flag Leek



Tall Green Curled Scotch Kale

KOHL RABI

A plant forming a firm bulb above the ground and bearing short leaves. The bulb is the edible part, and when cooked tastes very much like turnip. If the seed is sown early, the young bulbs will be ready to use in spring, and a planting in July will secure good vegetables for fall use. The seed should be planted in the open garden in 18-inch rows and the young plants thinned to four or six inches. It does not transplant well, unless when very small.

EARLY WHITE VIENNA The most desirable variety for general use. Is very early and has small tops. Color, light silvery green. **Pkt. 5c; oz. 25c; ¼ lb. 70c; lb. $2.25.**

Early Purple Vienna. Has a bright purple bulb, much liked in Germany. The leaf and stems are green and tinged with purple. **Pkt. 5c; oz. 25c; ¼ lb. 70c; lb. $2.25.**

Large Green. A popular table variety, having a light green bulb. **Pkt. 5c; oz. 20c; ¼ lb. 50c; lb. $1.75.**

MORSE'S LEEKS

A species of onion which does not form a bulb, but is used for its mild and delicious root, stem or neck. It can be planted in 16-inch rows, and the young plants thinned to about four inches. When well grown, hill up with earth to get a long white stem. Seed should be planted in June for good plants in the fall and winter. Leek is a vegetable of unusual merit, and is not half appreciated by the American people, while it is regarded as a great favorite by many of our foreign population. Plant some this year.

MORSE'S AMERICAN FLAG A very fine leek with long, large stems, which are sweet and white when properly blanched; vigorous grower. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.25.**

Carentan. The largest variety, though the stems are not so long as some others. Leaves are very broad. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

DOBBIE'S CHAMPION. A good leek, is delicious, and here is one with a very long neck, thick and meaty. **Pkt. 10c; oz. 30c; ¼ lb. 90c; lb. $3.00.**

GIANT MUSSELBURGH. Thick, long stems, of sweet, mild flavor. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.25.**

Morse's LETTUCES

View taken of this year's field of Iceberg Lettuce at our seed farm in San Juan Valley, California. These heads were nearly as large as cabbages. This strain of Iceberg has been developed and selected by us.

Lettuce is represented by four distinct classes or types—by the thick-leaved, smooth-edged **cabbage-heading type,** such as Big Boston, Cal. Cream Butter, Deacon, May King and Salamander; the curly and thin-leaved, tight-heading, **crisp type,** represented by Hanson, Iceberg and Los Angeles; the curly and thin-leaved **bunching** or **non-heading type,** as Black Seed Simpson, Grand Rapids, Prize Head, The Morse, and the **Cos** or **celery** type. There are early, medium early and late varieties, of **each type,** as well as those especially adapted for green house, hotbed, winter, spring, summer and autumn uses. There is so great a difference in localities in regard to the value of lettuce that a uniform rule of culture cannot be adopted. For the ordinary house garden it is desirable to use one variety of each type, and several plantings should be made to secure a succession. The seed should be planted in rows 18 inches apart, as early as possible, and the young plants of cabbage varieties should be thinned to six or eight inches apart. Varieties that do not head may be left quite thick and thinned out as used.

BIG BOSTON A popular market variety, used largely in the South to grow winter lettuce for Northern markets. A light-green cabbage variety, slightly tinged with brown in the head. Has a particularly fine golden buttery head. **Pkt. 5c; oz. 20c; ¼ lb. 55c; lb. $1.75.**

BLACK SEEDED SIMPSON. A bunching variety, forming no definite head. It has a large mass of fine brittle leaves of a light-green attractive color. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

Black Seeded Tennisball. An old, well-known variety. Very desirable for hotbed culture in winter and for withstanding heat in summer. A light-green cabbage sort, forming hard heads. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

Boston Market. Light-green cabbage variety, slightly tinged with brown on the head. Forms a compact, buttery head. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

CALIFORNIA CREAM BUTTER, or Royal Summer Cabbage. A very popular variety for autumn and winter use. Forms a very large head, which is very buttery, and of a rich golden-yellow inside. The leaves are thick and bright green, slightly tinged with brown on top of head, and the outer leaves are slightly spotted with inconspicuous brown spots. Easy to grow and a good shipping variety. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Deacon. A large cabbage variety, having thick, bright-green leaves; forms a large, buttery head; very bright golden-yellow inside. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

Denver Market. A handsome variety, forming tight, conical heads. The leaves are very deeply savoyed, and even the outside leaves are tender and crisp. Color is light green. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

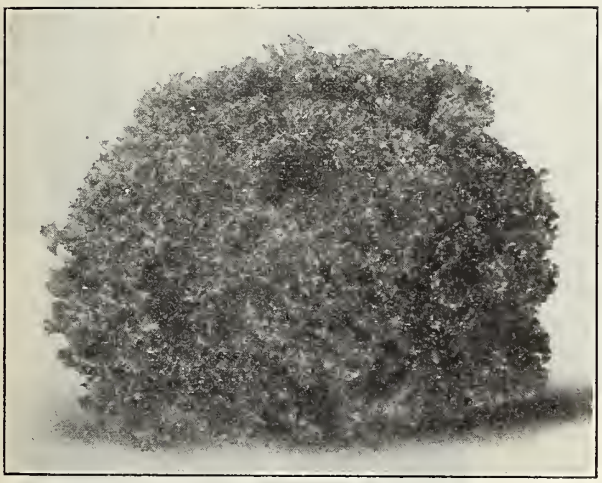
Drumhead, or Malta. Sometimes called "Chinese" lettuce. A very large, tight-heading variety. Leaves are rather coarse, but very brittle and tender. Is dark green and slightly curled. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

Early Curled Simpson. A loose-bunching sort, forming no definite head. Is crisp and tender; light green in color. Is very hardy and easy to grow. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Grand Rapids. The well-known forcing variety for the Middle West, where butter-headed or cabbage varieties do not grow well under glass. Is a loose-bunching variety, forming no definite head. Is extremely curly, and its light yellowish-green color makes it very attractive. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

HANSON A fine, large-heading variety. Leaves curled on the edges; light yellowish-green in color. The head is crisp and brittle and flavor excellent. Is the very best house garden variety in existence, and much the finest variety of its class. Hanson is similar to the famous Los Angeles lettuce listed below, but is larger and lighter green; an extra fine sort. Allow 12 inches for each head. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

ICEBERG **MORSE'S STRAIN:** Under favorable conditions this lettuce reaches a large size, as the illustration on the preceding page shows, but, no matter what the size, the leaves are always very crisp and tender. Iceberg stands hot weather remarkably. Give each head 14 inches in the row. The color is light green, lightly tinged with brown. Crisp type. Try this either for home or market garden. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $1.75.**



Grand Rapids Lettuce—A Curled Type

LOS ANGELES **OR NEW YORK.** A large, crisp, tight-heading lettuce which is a great favorite in the markets of Los Angeles and San Francisco. This is a lettuce much raised around New York whence its name was taken. The quality is the finest and is an excellent lettuce for the garden. The chances are ten to one that those fine little sweet heads of lettuce you buy in the San Francisco markets are Los Angeles variety. We sell hundreds of pounds of this to the market gardeners. Illustrated on front cover in colors. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

MAY KING A very early new variety, forming fine hard heads within a few weeks after planting. It is medium sized, light green, with buttery but crisp heads. There is just a faint tint of brown on the head.

We have had no end of praise from our friends and customers who have tried this variety. It is essentially a spring sort, and does well all summer. Being of rapid growth and quick heading, it is especially recommended for home garden, and is universally esteemed. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

PRIZE HEAD. One of the very best loose-bunching or non-heading varieties. Leaves brown, very curly and of remarkably fine flavor. Grows quickly and all except the outer row of leaves are very brittle. It is probably the most easily grown lettuce in cultivation. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

Salamander. One of the most popular varieties for withstanding heat. Medium size, light green, and forms a hard, buttery head of fine quality. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

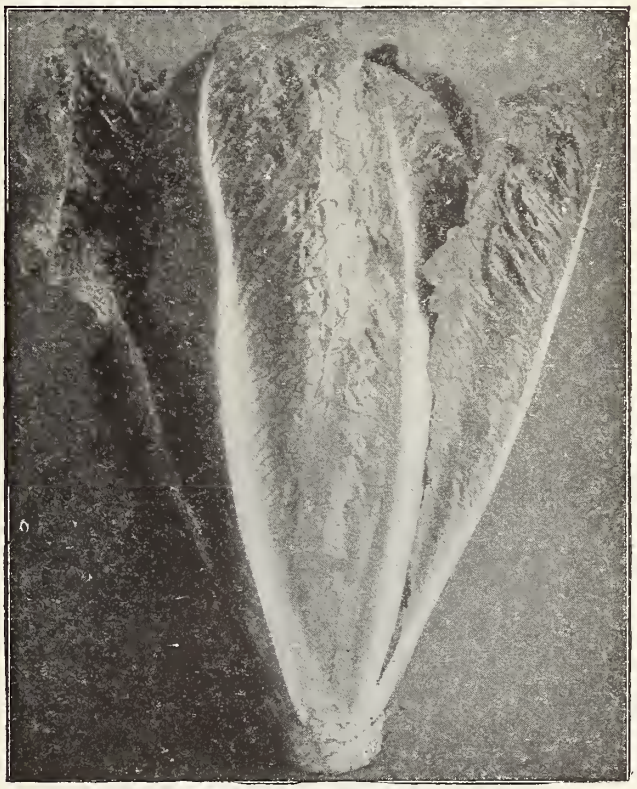
THE MORSE A large, loose-bunching or non-heading variety, forming a large bunch of leaves, which are very crisp and of fine flavor. In color it is a light green and very attractive. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

May King Lettuce

White Seeded Tennis Ball. This variety is the same as Boston Market, which see for description. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

White Summer Cabbage. The oldest and best known cabbage-heading variety. Forms a medium-sized hard head of fine quality. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

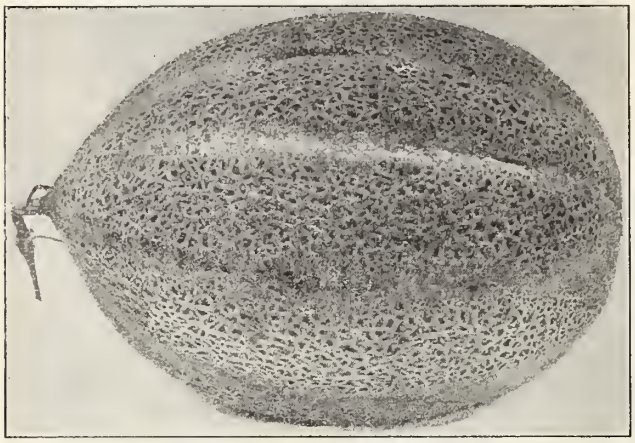
WHITE PARIS COS The best of the Cos or celery varieties. Forms a large light-green plant with the head well folded and quite solid. Cos lettuce is also called **Romaine,** and is very popular with our foreign population, for it is highly prized in England and France, while little known to our own people. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**



White Paris Cos Lettuce

MUSKMELON OR CANTALOUPE

Plant hills in rich, moist land, using one ounce to 100 hills, or two to three pounds per acre. Six feet each way is a good distance for the hills. Sow the seed after all danger of frost is over and do not cover deeply. Muskmelons require plenty of water, and if conditions are favorable, will make a strong, vigorous growth, and most varieties bear heavily. It is best to pick off the early runners to make the plant more stocky and thick. Wherever possible melons should be grown in the home garden, for the charm of a good melon is in getting it fresh from the garden and direct to the table.



Acme or Baltimore Cantaloupe

ACME, OR EARLY BALTIMORE. One of the best all-round melons in cultivation, and recommended for its uniform shape and size and fine quality. Is slightly pointed at stem end, ls long and oval, somewhat ribbed and coarsely netted. The flesh is thick, green and very sweet. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Bay View. A standard variety. Frult large, oblong, heavlly ribbed and netted. Flesh light green and of good flavor. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

BURRELL'S GEM OR DEFENDER

Many like a fine grained, smooth, salmon-red fleshed muskmelon. Such a one is Defender, the best of this sort; medium sized, oval; deeply netted and of an entirely distinct and delicious flavor. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.25.**

Extra Early Citron. Fruit ball-shaped, skin green and flesh llght green. Very early, medium-sized. Very productive: fragrant and of remarkably fine flavor; slightly netted. **Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. $1.00.**

Emerald Gem. A salmon-fleshed variety of remarkably fine flavor and fine quality. Fruit medium-sized, globular, slightly flattened at the ends; skin only slightly netted; very thick and well ripened close to the rlnd. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Rocky Ford—The most largely grown Muskmelon

Extra Early Hackensack. An early variety wlth almost globular fruit, whlch is heavily ribbed and netted. Flesh thick and light green, medium size. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

FORDHOOK. One of the best home-garden melons; of small size, globe-shaped, flattened at the ends. Roughly netted, while the skin showing through the netting is emerald green. The flesh is rich salmon in color, very solid and of delicious flavor. The rind is extremely thin and the seed cavity unusually small. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

GOLD LINED ROCKY FORD

A new melon from Rocky Ford, Colorado; of a fine uniform shape and without rlbs; slightly oval; meat thick, green, and llght-gold toward center. We recommend this as an extra fine melon in flavor and in every way. See front catalogue, cover illustration. Selected stock. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

HACKENSACK, OR TURK'S CAP. The flavor ls sweet and dellclous, and this is the best of the very large varieties. Hackensack has green flesh, flattened ends, thlck irregular ribs and coarse netting. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Hoodoo Muskmelon

THE HOODOO. The seed cavity is very small, the rind very thin indeed, and the edible, fleshy part very thick and meaty. Hoodoo is of orange or salmon color, small size and of most delicious flavor. **Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

Montreal Market. A large-fruited variety, slightly oval. Skin dark green, heavily netted. Flesh light green. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

Petoskey, or Paul Rose. Excellent market variety, wlth thick, firm orange-colored flesh. Rather larger than Netted Gem, is slightly oval, ribbed and heavily netted. Skin light green, changing to a faint golden hue when fully ripe. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

ROCKY FORD OR NETTED GEM.

The most largely cultivated variety in use. Grown in great quantities in Colorado. Fruit is slightly oval, finely netted and slightly ribbed. Flesh thick, green, very sweet and of fine quality and high flavor. It would seem that from the immense areas of land devoted to the Rocky Ford or Netted Gem Melon, that there is but one variety in cultlvation. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

TIP TOP

One of the best known of the deep yellow or salmon flesh varietles. The fruits are large, nearly round, slightly ribbed and lightly netted over a light yellow skin. Very highly flavored and gives general satisfaction. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

CASSABAS or Winter Muskmelons

Golden Beauty Cassaba.

The Cassaba has come to stay. To some extent the Cassaba flavor is an acquired taste, but judging from the increasing popularity of the two varieties we list, an immense population is acquiring the taste. One now sees these Cassabas in all the Eastern markets, and they are on the bills of fare of all the finest restaurants. They are plentiful as late as February, when all other fruits are rare. Culture is the same as for muskmelon.

GOLDEN BEAUTY

This one we recommend as the best. It begins to ripen in July and continues bearing and ripening all summer and fall, or until frost comes. The later fruits can be stored in a cool house or cellar and will ripen slowly, so that they can be marketed from time to time until late in January or early February. Golden Beauty is bright yellow, about globular, with wrinkled skin, slightly pointed at the stem end. The fruits are about six to eight inches in diameter. The flesh is pure white and very thick. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

WINTER PINEAPPLE This is the best of the later ripening winter varieties. As it ripens late on the vines, it can be kept for a longer period in the cellar. The fruits are very solid and heavy, about 10 to 12 inches in diameter, thick at the base and tapering at the top. The color is deep sea green, with mottled white and green at the bottom. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

The Originator's History of the "HONEY DEW" CASSABA

The original seed of this new melon was secured from a melon shipped from Africa to New York City. This seed was planted at Rocky Ford, Colorado, and crossed with the genuine, original "Rocky Ford" cantaloupe by pollenization. The following season this hybrid seed was again crossed with the Improved Hybrid Cassaba. Seed enough was obtained from this cross to plant one and one-half acres, from which I shipped three cars, aggregating 1175 crates, which were shipped to Chicago. After paying freight, icing charges, and commissions, the three cars netted me $3,719.00. After deducting the price of the crates, I still had $3,600.00 net from the one and one-half acres, or $2,400.00 per acre.

I named the melon "Honey Dew." It is as sweet as honey and has the mingling of several flavors—pineapple, banana and vanilla predominating.

The average size of the melon is six inches in diameter and seven to eight inches in length. The flesh is an emerald green, very thick, melting, and fine grained; can be eaten to the extreme rind. The seed cavity is very small, the rind impervious to water. The melon does not shrink in weight, is not easily bruised, and is a splendid shipper. It matures about ten days later than the Rocky Ford strains and is very prolific. Yields at the rate of 8,000 to 10,000 melons per acre.

See page 9 of Novelties in this Catalogue.

WATERMELON

ANGELINO This is a new California Watermelon which has met with great favor and is being more largely grown each year. It is a profitable melon for growers; ships well; is dark green with bright red flesh. Sells easily; quality and flavor excellent. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

CULTURAL NOTICE: Owing to the tendency of the seed of Angelino to split open, we advise all planters to soak the seed in water for only a few hours. It soon closes and is ready to plant, and every seed will germinate, but if planted before soaking, the seed becomes filled with dirt and decays. Please heed this notice.

BLACK-SEEDED CHILIAN. This is a wonderfully fine melon. Similar to the white-seeded variety but with thinner rind. We recommend this for home gardens. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

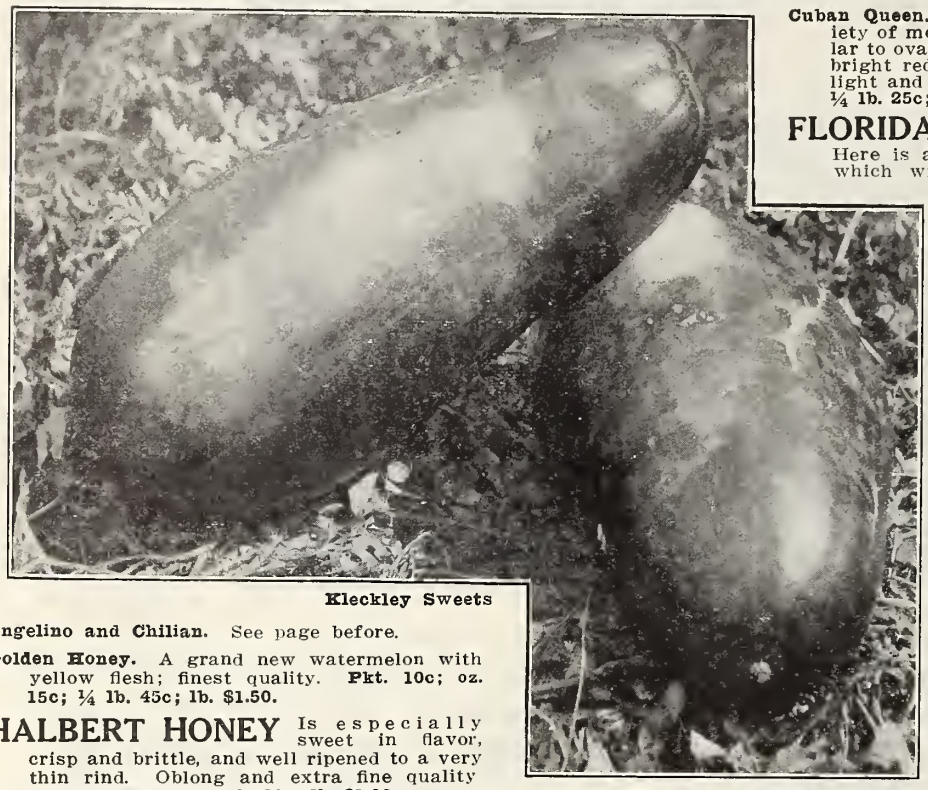
CHILIAN A very brittle, thin-skinned melon, of highest quality. It is slightly oblong; the skin is deep, rich green; slightly mottled darker green. Seed is white. The flesh is bright red and the flavor is remarkably fine and sweet. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Watermelon Angelino

WATERMELON

Light, sandy or gravelly soil is necessary for the best watermelons. They seldom do well on heavy adobe or clay soils, and these lands should be avoided for watermelons as a farm Crop. In the garden the soil can be made suitable by spading in each hill some well-rotted manure and sand or loam.

Plant the seed about the middle of May, in hills about eight feet apart. Use five or six seeds to a hill and thin out to two plants as soon as the second or third leaf shows Use about four ounces of seed to 100 hills, or as a farm crop, two to four pounds per acre.



Kleckley Sweets

Angelino and Chilian. See page before.

Golden Honey. A grand new watermelon with yellow flesh; finest quality. **Pkt. 10c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

HALBERT HONEY Is especially sweet in flavor, crisp and brittle, and well ripened to a very thin rind. Oblong and extra fine quality **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Cole's Early. A great favorite for a large area of different climates. Fruit medium sized, oblong, striped and mottled. Flesh bright red, solid and of fine sweet flavor. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Harris' Earliest. An extremely early melon recommended for localities where the season is short. The fruits run larger than most early varieties; is slightly oval, lightly striped and mottled with light and dark green. The flesh is bright red, and is of delicious quality. Seed black. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Citron, Red Seeded. A small, globular variety, striped and marbled with light green. Flesh white and solid; seeds red. Used exclusively for pickles and preserves. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Citron, Green Seeded or Colorado Preserving. For stock feed. An oblong dull green variety about 18 inches long. The flesh is green with green seeds, and is used largely for stock feeding. A common plan is to split them open with an axe and feed them to cattle in the field. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 60c.**

Cuban Queen. An excellent shipping variety of medium to large size, and globular to oval shape. Rind quite thin, flesh bright red and firm. Skin striped with light and dark green. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

FLORIDA FAVORITE

Here is a watermelon of a fine flavor which will please everyone, and yet which can be shipped and will reach the market in good shape. No wonder it is such a favorite with planters, and sells well with commission men. A very large variety, with large, oblong fruit and dark green skin, mottled with a deeper shade. Rind thin, flesh deep red and of fine quality. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

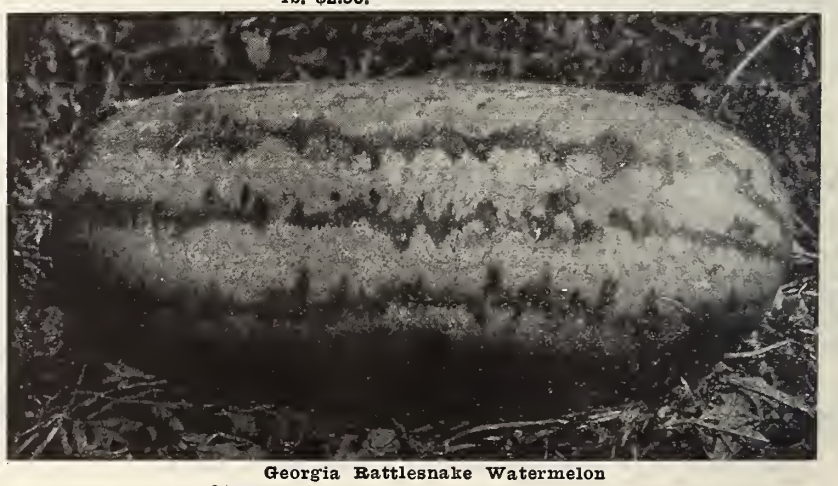
Fordhook Early. The earliest of all melons and of the finest quality. Fruit almost globular; color deep mottled, with occasional faint stripes of lighter green; flesh bright red and crisp; rind tough, which makes it a good shipping variety. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

GEORGIA RATTLESNAKE

One of the oldest and most popular sorts, and frequently known as **GYPSY.** A large, oblong variety with decided stripes of light and deep green. Rind is tough, but flesh is of good quality and bright red; a good shipping and market melon. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Iceberg. In general appearance this variety resembles Kolb's Gem, but the skin is darker in Iceberg, and shows a spot of bright yellow where the fruit rests on the ground. The rind is thin and the flesh deep red. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

KLONDYKE: This new melon is exceptionally sweet and fine. It was bred in California and stays in perfect condition in this climate. A good shipper and excellent in every home garden; oblong. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**



Georgia Rattlesnake Watermelon

WATERMELONS—Continued

KLECKLEY SWEETS **OR MONTE CRISTO.** A very desirable variety for the home garden or nearby markets. Fruit medium sized oval, and skin dark green; flesh bright red and very sweet. Skin is brittle. It is the very sweet, honey-like flavor that makes it especially distinct from all other varieties. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Kolb's Gem. The fruit is large, thick and oval, with flattened ends. Skin striped with light and dark green. Flesh bright red. The well-known Southern shipping variety. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Rubber Rind. A handsome new deep green watermelon, with an exceedingly tough, exceedingly thin rind; oblong, large—often 50 to 100 lbs.; dark red, sweet flesh; tender. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

TOM WATSON The skin is a dark mottled green, while the flesh is a brilliant scarlet, and the heart is very large, with a small seed area. The flavor is most delicious and refreshing. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

MUSHROOM SPAWN

CULTURAL DIRECTIONS

Ten pounds will spawn about ten feet square. Mushrooms can be grown in any dark room or cellar where the temperature can be kept at from 50 to 60 degrees. From some old pasture procure good rich soil, and to every bushel of this soil add two bushels of fresh horse manure. Of this well-mixed compound prepare a bed, say four feet wide. Put down a thin layer and pound it down hard, and go on until you have a bed 12 or 18 inches thick. If the manure heats too much it must be turned over frequently until sufficiently cool, otherwise it will burn out its vitality. As soon as the temperature of the bed falls to 70 degrees, the spawn may be inserted in pieces about the size of a walnut, about one inch deep and 10 to 12 inches apart. Cover with loamy soil about two inches deep and beat it down evenly and firmly. Finish off with a covering of clean straw about a foot thick, and the work is done. If the temperature is right, in six or eight weeks you may expect mushrooms. The beds will continue bearing from 2 to 3 months. After the first crop is gathered spread over the bed an inch of fresh soil, moisten with warm water and cover with straw as before. Keep the bed moist at all times but not soaked. The main conditions in mushroom growing are proper and uniform temperature and very rich soil.

PURE CULTURE AMERICAN SPAWN. On account of the long trip from England we have abandoned English spawn, as our customers have had better results from the American spawn. Mushroom Spawn comes in bricks weighing about 20 ounces. Spawn can be sold cheaper than our prices, but not better. **Brick 35c, postpaid; 10 bricks $2.75; 100 bricks $18.00.**

Pacific Coast P. C. The "P. C. P. C." initials with which these bricks are stamped stand for Pacific Coast Pure Culture. This spawn is manufactured across the bay and is absolutely fresh and pure. It is made by the most recent scientific methods, and if any spawn will give good results it will. Also it will run somewhat quicker than the preceding or any other strain. The supply is strictly limited. Everyone can raise good mushrooms from such good spawn as "P. C. P. C." **Brick 35c; 10 bricks $2.75; 100 bricks $18.00.**

Mushrooms from Morse's Pure Culture Spawn

MUSTARD

The leaves of these varieties of mustard, as here listed, make excellent greens of sharp, pungent flavor, and are cooked the same as spinach or beet leaves. Sow the seed in drills early in the spring and at frequent intervals throughout the summer to secure a constant supply of fresh greens. Mustard is hardy and is easily grown. One ounce will sow fifty feet of row.

Chinese. A very hardy, broad-leaved variety. Leaves are thick and deeply savoyed, with broad white midrib. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

FORDHOOK FANCY. The dark-green leaves of this variety are more curled on the edges than any other sort, making most attractive green. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 60c.**

GIANT SOUTHERN CURLED Large variety, forming a great mass of beautiful leaves, which are ruffled and finely curled on the edges. Hardy, vigorous, highly recommended. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

White English. Light green variety; tender leaves. Seed light yellow and pungent. The commercial mustard seed is this sort. **Oz. 5c; ¼ lb. 15c; lb. 40c.**

Brown Onion Sets. Plant Sets for earliest crop

ONION SETS

Onion Sets are miniature onion bulbs grown from seed, and are so formed by sowing 50 to 75 pounds of seed per acre. Good sets are those of very small size and well ripened.

Plant near the surface in rows of 12 inches apart and two inches between the sets, using 250 pounds of sets per acre When raised from sets, the onions can be used in the green state or may be ripened off for large onions, in which case they are fully six weeks earlier than when raised from seed. Prices are subject to market fluctuations as the season advances.

Brown or Yellow Onion Sets. Sept. to May. **Lb. 20c.**

White Onion Sets. Sept. to Dec. only. **Lb. 25c.**

Bermuda Sets. July and Aug. **Lb. 30c.**

GARLIC Large quantities are furnished at prevailing market prices. **Lb. 30c; 10 lbs. $2.50.**

SHALLOTS A yellow multiplying onion. Until May 1st only. **Lb. 30c.**

These prices are postpaid to the Fourth Zone.

Morse's ONION SEED

HOW TO GROW ONIONS FOR MARKET

The most essential item in growing Onions for market is good seed—seed that will come up and seed that will produce the variety you want—**cheap seed is very poor economy.**

For general crop the seed must be sown during the month of January or before February 1st, and, if the location is a fairly dry one, it is best to sow about the middle of December. The seed should be sown with a seed drill in rows 14 inches apart, using 4 to 4½ pounds of seed per acre. In very weedy land the rows may be 18 or 20 inches apart when less seed is required.

For planting a single row of onions among strawberry plants about two pounds of seed per acre is sufficient.

The land must be thoroughly worked before planting, and usually two good plowings, a good disking, and a harrowing are necessary.

The crop must always be kept free from weeds, and it is usually necessary to weed out in the row by hand once or twice. Hoeing between the rows may be done oftener. It is not necessary to thin the plants in the row, since some thinning is naturally done during the hand weeding.

The land chosen for onions should he wet land, preferably loose, sandy loam or peat, and should always be kept well drained. Heavy adobe or clay soil is good, but needs to be irrigated in May, June and July, and the onions are not so well colored or even in shape in heavy, stiff soils. Steady, even growth is necessary to good onions, and a check in the growth, whether from disease or drought, causes them to run to seed badly. Onions are ready to harvest usually the latter part of August, when, with a good crop, the tops are pretty well ripened down. If the tops are still standing and green, it is well to run a light roller or plank over them to press the tops down, and the onions should be pulled in about ten days after this is done, whether the tops have dried off or not. It requires not less than two full weeks to properly cure onions after they are pulled. In localities where fog is prevalent it is best to spread the onions out on the ground, not more than one bulb deep. It is usual in other climates to throw into windrows a foot or more deep and cover lightly with straw or dried tops. It is best not to top and sack until ready to ship to market, and if onions are to be kept for any length of time they should not be sacked, but should be put under cover on a floor or in a bin, with abundant circulation of air, and be kept absolutely dry.

The value of an onion crop is naturally dependent on the market and on the character of the land planted. Land that is very foul should usually he avoided as too expensive. Also avoid land which has just had a hay or grain crop, and if possible use land that has been planted to vegetables or some hoed crop, especially peas and beans. An onion crop should not he repeated more than three times on the same land, and usually twice is best, since onion diseases (of which there are many) appear very plentifully. An average crop runs from 150 to 200 centals (15,000 to 20,000 lbs.) per acre, and the cost represented by labor, rent, sacks and transportation is estimated roughly at $75 per acre.

AILSA CRAIG. An immense light yellow onion; fine grained, crisp, mild flavored and early. They not infrequently measure 18 inches around, and weigh two pounds. Ailsa Craig is the largest onion grown. **Pkt. 10c; oz. 45c; ¼ lb. $1.35; lb. $4.50.**

AUSTRALIAN BROWN. Early and very hardy variety which does especially well in California. Should be planted early, on low, wet grounds, to get large bulbs. The skin is thick and the color is a rich brown. Is especially noted as a long keeper, as it keeps well into spring, and much longer than other varieties. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

Crystal White Wax. A pure white variety of the Bermuda type; Teneriffe grown. The beautiful clear white onion seen in our markets in crates early in spring is this variety. **Pkt. 15c; oz. 50c; ¼ lb. $1.50; lb. $5.00.**

Extra Early Barletta. Extremely early variety. Seed planted in February will form ripe onions the last of July. Is a white onion, forming small bulbs about one inch in diameter. Valuable for home-made pickles. **Pkt. 5c; oz. 25c; ¼ lb. 75c. Crop doubtful.**

California Early Red Onion

Australian Brown Onion

MORSE BROWN GLOBE A fine, large, globe-shaped sort, of a rich seal-brown color. It ripens uniformly and nearly every plant makes a solid, hard bulb. It has all the long-keeping characteristics of Australian Brown, and is one of the very best varieties for market. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

California Early Red. A variety much used for very early onions. If the seed is sown in beds in August and set in the field in November or December, good market onions can be had in May. It is not a good keeping variety, but is of very mild flavor and of fine quality. **Pkt. 5c; oz. 20c; ¼ lb. 50c; lb. $1.75.**

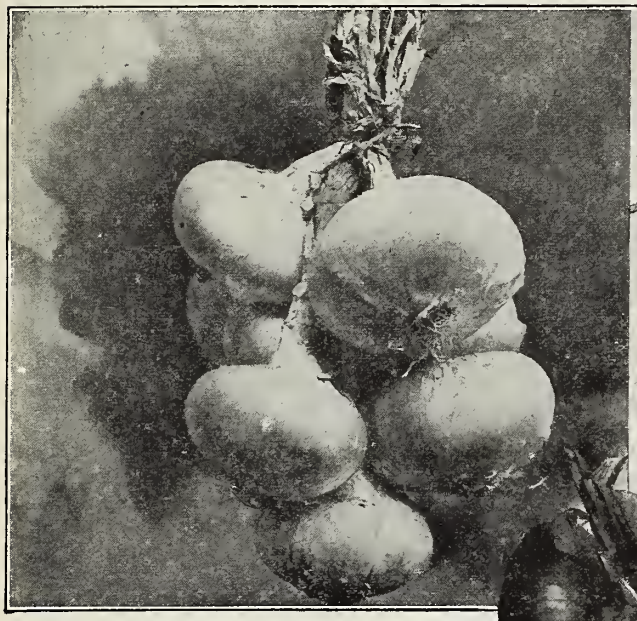
Extra Early Pearl. A very early variety with pure white skin, rather coarse grain and mild flavor. In shape it is flat and is unsurpassed for early sets or home-made pickles. **Pkt. 5c; oz. 25c; ¼ lb. 75c. Crop doubtful.**

Extra Early Red Flat. A very early, flat variety, with dark purplish-red skin. Forms a hard bulb with good keeping qualities. **Pkt. 5c; oz. 30c; ¼ lb. 90c; lb. $3.00.**

Mammoth Silver King. An early, large, white, flat onion. Is not a keeping sort nor a good shipping variety, but is valuable for home use and near-by markets. Is very mild and of fine flavor. **Pkt. 5c; oz. 25c; ¼ lb. 75c.**

OHIO YELLOW GLOBE The best of the yellow Globe varieties. The skin is bright, glossy, orange-yellow, and the flesh is white and fine grained. The bulbs are remarkably uniform in size and shape, and being firm and hard, possess fine keeping and shipping qualities. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.25.**

ONIONS—Continued



White Portugal Onion

Ohio Yellow Globe Onion

PRIZE TAKER

A very large globe-shaped variety, with light-yellow skin and white flesh of mild flavor. It is a heavy cropper and a fairly good keeping onion, and is very popular as a market variety. Individual bulbs often weigh two or three pounds. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.25.**

RED WETHERSFIELD

The best-known and most widely used red variety. In shape it is flattish, but thick, with very firm flesh. Is hard and an excellent keeper, as well as a heavy cropper. The color is a bright purplish-red. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

Southport Yellow Globe. A fine, orange-yellow, globe-shaped variety. Is a heavy cropper and forms a long-keeping hard bulb. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

Red Wethersfield Onion

Southport Red Globe. A large, globe-shaped, bright purplish-red variety. Is a late sort and an excellent keeper. A very handsome variety and of fine quality. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $2.00.**

Southport White Globe. A pure white globe-shaped variety. Forms handsome hard onions with wax-like, pearl-white flesh. Is used a great deal for green onions, owing to the clear white stem. **Pkt. 5c; oz. 40c; ¼ lb. $1.20; lb. $4.00.**

Red Bermuda. A very early flat variety, used largely in the South for planting in the fall and marketing in the spring. Is of mild flavor and ships well, but will not keep for winter. Bulbs are pinkish-straw color. **Pkt. 5c; oz. 30c; ¼ lb. 90c; per lb. $3.00.**

WHITE PORTUGAL OR SILVERSKIN

The best known and most largely used white onion. Is flat on the bottom and thick toward the top. Very hard and firm and an excellent keeper. Is largely used for white onion sets as well as for market onions and pickles. **Pkt. 5c; oz. 35c; ¼ lb. $1.00; lb. $3.50.**

White Queen. A very early white onion. Rather small and does not keep well. Is of fine, mild flavor, and largely used for home-made pickles. **Pkt. 5c; oz. 25c; ¼ lb. 75c; crop doubtful.**

White Bermuda. A very early variety, used largely in the South as an early market onion, when the seed is sown in the fall and the onions harvested in the spring. It is mild and of particularly fine flavor. The color is a pinkish-straw, and the shape is flat. The seed we offer is grown in Teneriffe, Canary Islands, and is a fine pure strain. **Pkt. 5c; oz. 35c; ¼ lb. $1.00; lb. $3.25.**

White Italian Tripoli. A large, globe-shaped onion, with clear white skin and pearl-white flesh. Of mild, sweet flavor. Not a good keeping onion, but much esteemed as a garden sort. **Pkt. 5c; oz. 25c; crop doubtful.**

YELLOW DANVERS

This is the best known and the most generally used flat, yellow onion. It is the most hardy of all the varieties for California and will yield the surest and largest crops. Color bright orange-yellow; flesh white and firm. A good keeper, fairly early and of good size. It is also a good variety for transplanting to get early onions. One of the standard varieties on the San Francisco market, where it is often called "Silverskin," although of a bright yellow color. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

Yellow Dutch, or Strasburg. The most popular and best variety for set purposes. Is similar to the Yellow Danvers. Flat in shape, color and size, but as a set onion it has the quality of ripening down earlier and more uniformly. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $1.75.**

Yellow Globe Danvers. Morse's Strain of Globe Danvers is specially selected on our farms to give an even ripening crop. The bulbs are all of fairly large size, small at the neck and perfectly and regularly formed. Morse's Globe Danvers is the most popular onion for market and for shipping. Is almost ball-shaped, but a trifle flattened at both ends. It is a heavy cropper and a good, firm variety. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.25.**

ONION SETS. See page 35.

COLUMBUS
1492
BALBOA
1513
THE UNITED STATES OF AMERICA
PANAMA-PACIFIC INTERNATIONAL EXPOSITION
SAN FRANCISCO, MCMXV.
CELEBRATING THE OPENING OF THE PANAMA CANAL
THE INTERNATIONAL JURY OF AWARDS HAS CONFERRED A
GRAND PRIZE
upon
C. C. MORSE AND COMPANY
San Francisco, California
for an Exhibit of Morse's California Seeds.
EDUCATION
AGRICULTURE
MINING
ARTS & SCIENCES
MANUFACTURES
TRANSPORTATION
1904
PANAMA
1915

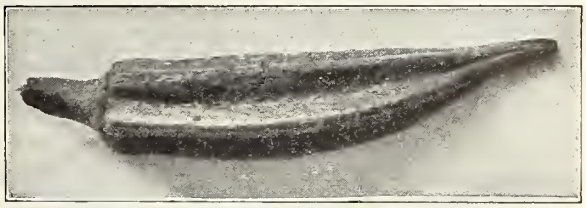
OKRA, OR GUMBO

The long, tender pods of okra are very delicious when sliced and cooked in soups. While this is its chief use, it is also boiled and served like other classes of vegetables. The tall sorts should be planted in hills about a foot apart, using about one ounce to 100 hills. The dwarf sorts may be planted in hills or in rows about three feet apart. Plant in any good soil about April 15th. The pods should be gathered when very young as they are then very tender.

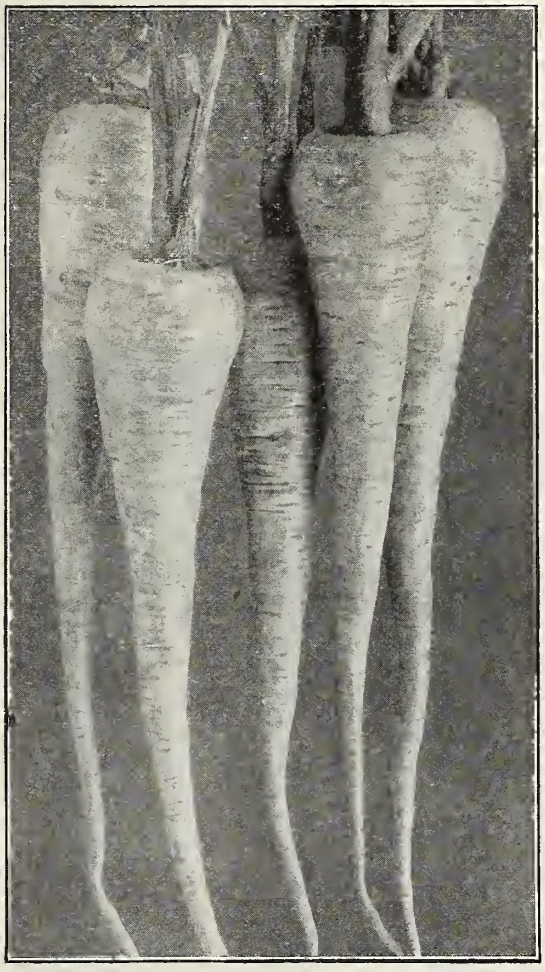
PERKINS MAMMOTH LONG POD A dwarf-growing, very early and prolific variety. Pods are long, slender, deep green and of fine quality. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

White Velvet. A medium-sized variety, bearing long, smooth, white pods, which are very tender. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

DWARF GREEN. An early dwarf and prolific variety, with thick green pods. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**



Okra—Long Pod



Hollow Crown Parsnips

PARSNIPS

A well-known vegetable for table use. It is also a very good stock food and quite as nutritious as carrots. It prefers very wet soil, and will thrive where carrots will not grow. A sandy soil is preferred since the roots are very long, and are difficult to dig in stiff soil. Sow the seed in the spring in 12 to 18-inch drills, using one-fourth ounce to 100 feet. In the field sow in rows 12 inches apart, using three pounds per acre.

HOLLOW CROWN A variety with a hollow or cup-shaped top, where the leaf stem begins. The most popular and best variety for all purposes. Skin smooth and white and flesh tender, while the root grows 18 to 20 inches long. The best part of it is contained in the first eight inches from the top. Our strain of Hollow Crown is the thick-shouldered type called "Student" by some dealers. It is particularly fine, smooth and regular. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 75c.**

Long Smooth, or Long Dutch. A very long variety with full crown. Very smooth white skin. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 75c.**

PARSLEY

Used for garnishing dishes of meat, or cooked in soups. A few plants in the garden will yield sufficient for a family, providing the leaves are cut often and the plant not allowed to seed. Sow the seed in drills early in spring, using one-fourth of an ounce to 100 feet.

Double Curled Parsley

PARSLEY

Champion Moss Curled. A very finely curled, bright green and very ornamental variety. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 90c.**

Hamburg, or Turnip Rooted. A plain-leaved variety, forming a long, thick edible root. **Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. $1.00.**

Plain or Single. A very hardy variety. The leaves are flat and not curled. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 90c.**

DOUBLE CURLED A curled variety, very hardy and easy to grow. Deep, rich green, and by many preferred to the extremely curly varieties. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 85c.**

EXTRA TRIPLE CURLED Very finely curled variety of dark-green color. One of the best varieties for all purposes. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 90c.**

MORSE'S PEAS

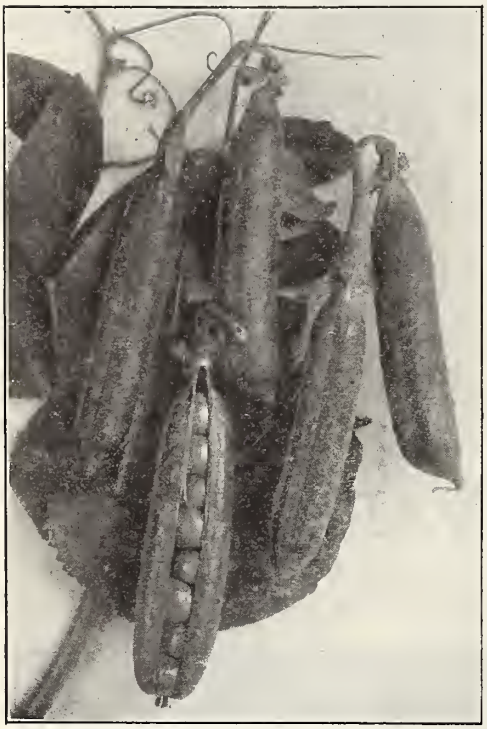
Peas are quite hardy and for very early markets can be planted in the fall in protected places, and ripe peas can be had in February. They require moderately rich soil, but not excessively rich or wet, or they will run too much to vine and do not bear heavily. The seed needs to be planted thick, using from 80 to 150 pounds per acre for seed or vegetable crop, or one pound for 100 feet of row.

The dwarf varieties can be planted in rows 12 to 18 inches apart, and the tall ones three feet. By using the various classes of peas, and by making several sowings of each, good peas can be had for a long season. In the garden the pods should be kept picked, as the plants will then continue to bear longer. All varieties have wrinkled seed except Alaska, First and Best, Marrowfat and Melting Sugar.

All charges are paid. See our Special Free Delivery offer on page 2.

EXTRA EARLY VARIETIES

Little Marvel Peas



ALASKA, or EARLIEST OF ALL. A smooth pea, well suited for extra early planting; vine 2½ feet high; pods small. Will not rot in cold, wet ground; popular with canners. **Pkt. 10c; lb. 20c; 10 lbs. $1.75; 100 lbs. $10.00.**

BLUE BANTAM. This grand new pea recently introduced by us has given greatest satisfaction to many of our customers. Blue Bantam is a medium dwarf vine pea, early in bearing and having very long peas of a splendid deep-green color. Add to this productiveness the fact that Blue Bantam has the highest quality, and is tender and unusually sweet when cooked, and you see why this pea is such a favorite. **Pkt. 15c; lb. 30c; 10 lbs. $2.50; 100 lbs. $17.50.**

AMERICAN WONDER. A dwarf or short-vine variety, growing about 12 inches tall, bearing short, well-filled pods; very early. **Pkt. 10c; lb. 25c; 10 lbs. $2.00; 100 lbs. $10.00.**

BRITISH WONDER. We cannot too highly recommend this new sort, which has so very many good points. Most pods contain about nine peas—about twice as many as the older early sorts. Add to this its size of pod, its habit of bearing a large number of pods, and you see that British Wonder yields marvelously. While in time of maturity it is only a week behind the earliest. Quality is excellent. **Pkt. 10c; lb. 25c; 10 lbs. $2.25.**

FIRST AND BEST, or EXTRA EARLY. One of the earliest tall varieties, with smooth, round peas, which ripen almost at one time. Grows two to two and one-half feet high; seed yellowish white; pods straight, short and well filled. Quality best of smooth-seeded early varieties. **Pkt. 10c; lb. 25c; 10 lbs. $1.75; 100 lbs. $10.00.**

LAXTONIAN. This is an ideal market and home garden pea, medium dwarf in habit of growth, but with very large pods, averaging five to six inches in length. Laxtonian seldom has any blank spaces in the pods. **Pkt. 10c; lb. 30c; 10 lbs. $2.50; 100 lbs. $17.50.**

LITTLE MARVEL. An extra dwarf, extra early pea, which is wonderfully prolific. Each pod has six or seven large peas, closely crowded in. Yields heavier than any other in this class. **Pkt. 10c; lb. 30c; 10 lbs. $2.50; 100 lbs. $12.50.**

NOTT'S EXCELSIOR. The earliest extra dwarf pea. Good flavor. **Pkt. 10c; lb. 25c; 10 lbs. $1.75; 100 lbs. $10.00.**

MORSE'S PREMIUM GEM, sometimes called LITTLE GEM. Plant our selection of this pea, for it is extra productive; is early, has short pods and always filled right up; 15 inches tall; flavor is sweet. **Pkt. 10c; lb. 25c; 10 lbs. $2.00; 100 lbs. $10.00.**

GRADUS, or PROSPERITY. Has the finest flavored peas of all. Tall, light vine; matures early. Peas and pods large size. **Pkt. 10c; lb. 25c; 10 lbs. $2.00; 100 lbs. $12.00.**

THOMAS LAXTON. A fine, early tall variety, similar to Gradus, but more hardy and not quite so early. It is also a little darker in color and has large blunt pods that fill well with peas of finest quality. **Pkt. 10c; lb. 25c; 10 lbs. $2.00; 100 lbs. $12.00.**

Thomas Laxton

PEAS—Continued

LATER OR MAIN CROP VARIETIES

ALDERMAN. A new pea like Telephone, only better. The vine is extra vigorous and the pods of Alderman are dark green and always well filled with fine large peas. This is the very finest and best pea of this class. You will thank us for calling your attention to Alderman. **Pkt. 10c; lb. 25c; 10 lbs. $2.00; 100 lbs. $12.50.**

ABUNDANCE. A tall, productive variety much like Advancer. It matures evenly and is used largely by canners. **Pkt. 10c; lb. 25c; 10 lbs. $1.75; 100 lbs. $9.50.**

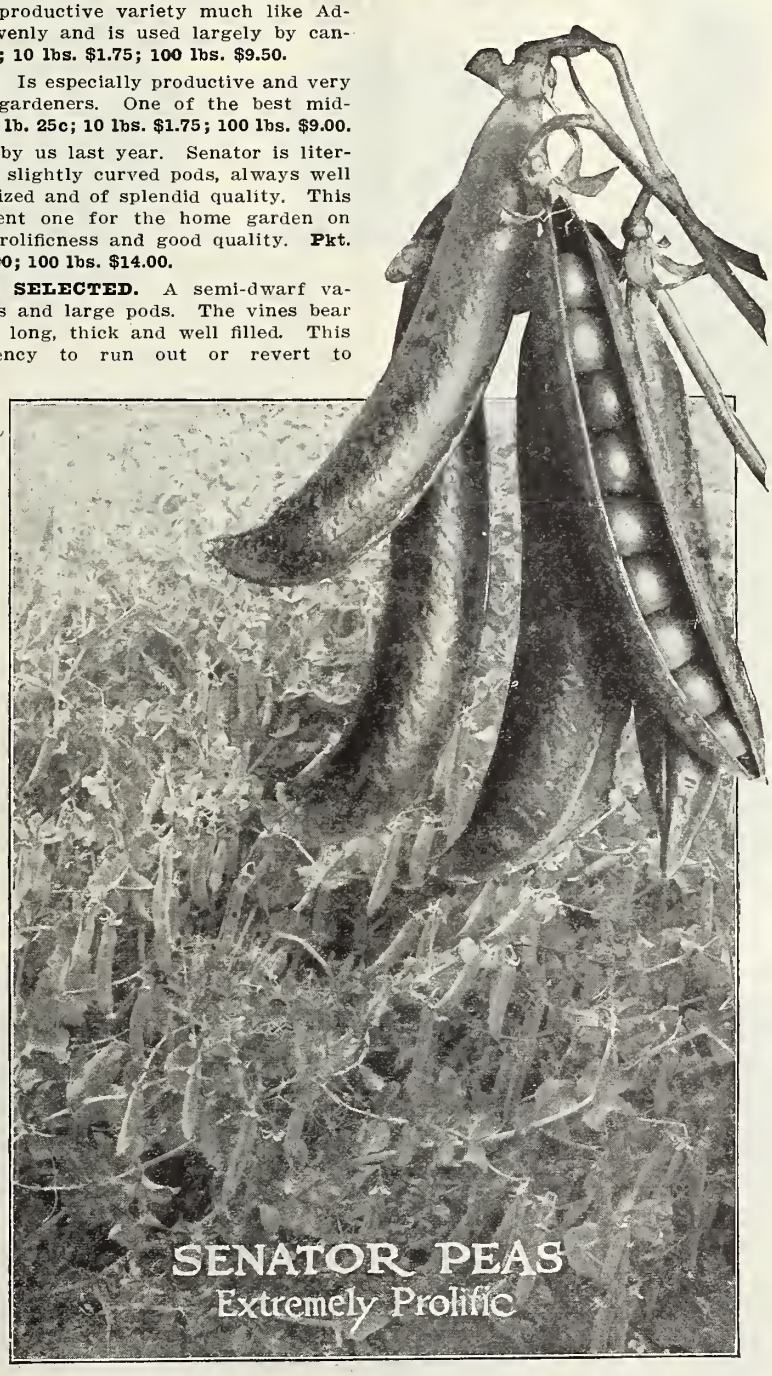
McLEAN'S ADVANCER. Is especially productive and very popular with market gardeners. One of the best mid-season peas. **Pkt. 10c; lb. 25c; 10 lbs. $1.75; 100 lbs. $9.00.**

SENATOR. Introduced by us last year. Senator is literally loaded with large slightly curved pods, always well filled. Peas medium sized and of splendid quality. This pea is a most excellent one for the home garden on account of its extra prolificness and good quality. **Pkt. 10c; lb. 25c; 10 lbs. $2.00; 100 lbs. $14.00.**

STRATAGEM MORSE'S SELECTED. A semi-dwarf variety with large leaves and large pods. The vines bear well and the pods are long, thick and well filled. This variety has a tendency to run out or revert to a small-podded type, and many stocks of Stratagem offered contain many small-podded plants. We offer an especially fine selected strain, free from small pods. **Prices—re-selected strain: Pkt. 10c; lb. 25c; 10 lbs. $2.00; 100 lbs. $12.50.**

HORSFORD'S MARKET GARDEN. A tall variety of medium height; very prolific; peas small and wrinkled, but pods well filled. Dark green and hardy and very popular as a canning variety. **Pkt. 10c; lb. 25c; 10 lbs. $1.75; 100 lbs. $9.50.**

CHAMPION OF ENGLAND. One of the most popular tall late varieties. Is very prolific and hardy, and the peas are of especially fine, rich quality. **Pkt. 10c; lb. 25c; 10 lbs. $2.00; 100 lbs. $11.50.**



TELEPHONE. Is tall and large; wrinkled peas of remarkably fine quality. A popular home garden and market variety; large pods. We have an especially fine, pure stock this year. **Pkt. 10c; lb. 25c; 10 lbs. $2.00; 100 lbs. $12.50.**

YORKSHIRE HERO, or ALAMEDA SWEETS. A very hardy and prolific, semi-dwarf, wrinkled variety. The peas are large and of fine quality, and the pods, which are broad and medium sized, remain in condition for a long time. It bears immense crops, both of pods and dried peas. **Pkt. 10c; lb. 20c; 10 lbs. $1.75; 100 lbs. $8.50.**

LARGE WHITE MARROWFAT. A very tall, hardy variety. Very productive but of inferior quality. These peas are not wrinkled nor are they sweet. Frequently when Marrowfat Peas are asked for the best quality is desired, and Yorkshire Hero is the variety desired. **Pkt. 10c; lb. 20c; 10 lbs. $1.50; 100 lbs. $9.00.**

MELTING SUGAR, or EDIBLE POD. A tall variety bearing long, flat, brittle pods, which are cut or broken and cooked like string beans. Is a delicious vegetable and should be better known and more generally used. **Pkt. 10c; lb. 35c; 10 lbs. $3.00.**

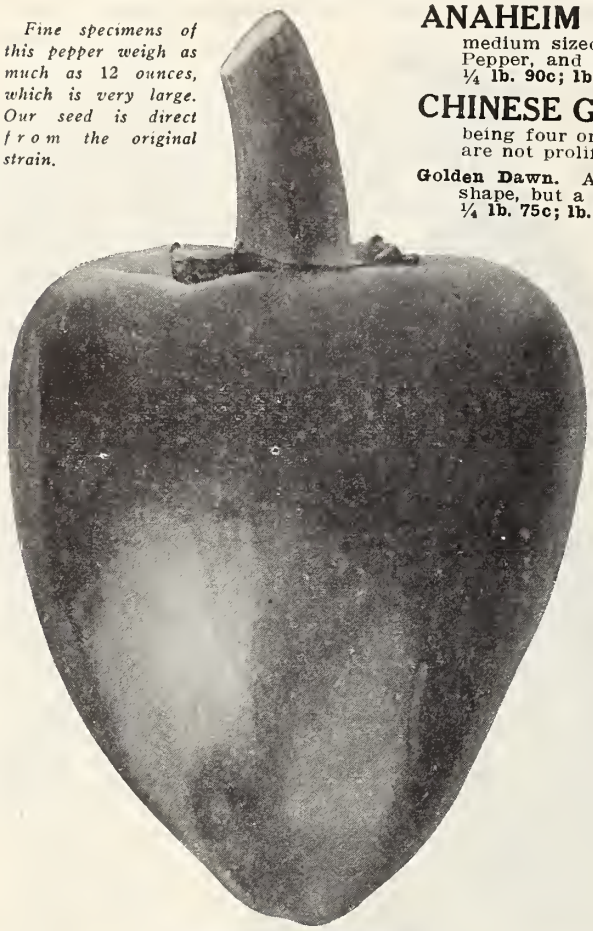
Orders from foreign countries should have 8 cents per pound added to the total amount. Tahiti and South Sea Islands postage rate is 50 cents per pound.

PEPPER

There are varied uses for Peppers, and while they are more popular in the South among the Spanish and Mexican people, they are used very largely by all who like strong, hot condiments. The several varieties are used for stuffing when green for pickles, for pulverizing when dry, and for soups, etc. Our selection of varieties includes all of the very best.

Peppers do best in hot climates, but can be grown quite successfully in most places on any ordinary soil. The seed germinates slowly and should be started in boxes, and the young plants transplanted after all danger of frost is over. Set in 18-inch rows.

Fine specimens of this pepper weigh as much as 12 ounces, which is very large. Our seed is direct from the original strain.



Pimiento Sweet Pepper

ANAHEIM CHILI This Pepper is largely grown in Orange county, and is used dried and for canning. It is long, 7" or so, medium sized in width, and is thick fleshed. The flavor is mild for a Chili Pepper, and one liked by Mexicans and Americans alike. **Pkt. 5c; oz. 30c; ¼ lb. 90c; lb. $3.00.**

CHINESE GIANT A very large, deep-red variety, very thick and blunt. It is fully twice as large as Large Bell, or Bull Nose, being four or five inches thick at the top and about six inches long. Plants are not prolific bearers. **Pkt. 10c; oz. 60c; ¼ lb. $1.75; lb. $6.00.**

Golden Dawn. A short, thick variety, similar to Large Bell, or Bull Nose, in shape, but a rich golden yellow, with a mild, sweet flavor. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

LARGE BELL OR BULL NOSE

Fruit large, round and blocky, and about three inches long and two inches thick. The color is deep green when fruit is young, but when fully ripened it is a rich, glossy blood-red. Plant grows about two feet high. **Pkt. 5c; oz. 35c; ¼ lb. $1.00; lb. $3.50.**

LONG RED CAYENNE. A strong, pungent variety, having long, pointed fruit, which is bright scarlet when ripe. A well-known and popular variety. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

PIMIENTO PEPPER This is a sweet Pepper—that is the difference—one which you will enjoy eating in salad, either fresh or canned. Canners and market gardeners are planting Pimiento largely. Very thick flesh, wonderful mild flavor. **Pkt. 10c; oz. 40c; ¼ lb. $1.20; lb. $4.00.**

Red Cherry. An ornamental as well as useful variety, the plant being tall and bearing profusely small, bright red fruit. The fruit is small, round, very hot, and is largely used for pickles. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

Red Chili. A rather small, bright-red variety, about two inches long and pointed. The pods are used in making Chili sauce, and are very pungent and hot. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

Ruby King. A popular variety of the Bell, or Bull Nose type. The fruit is large, bright, glossy-red, and the flavor is mild and sweet. A desirable variety for slicing in salads and for stuffing. **Pkt. 5c; oz. 25c; ¼ lb. 85c; lb. $3.00.**

SWEET MOUNTAIN, or SPANISH MAMMOTH. It is a late variety, bearing large, thick fruit, which is frequently eight inches long and two or three inches in diameter. When mature it is a deep glossy-red, and the flavor is mild and sweet. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

Sweet Upright. A large thick variety, with mild, sweet flesh. **Pkt. 10c; oz. 35c; ¼ lb. $1.20; lb. $3.50.**

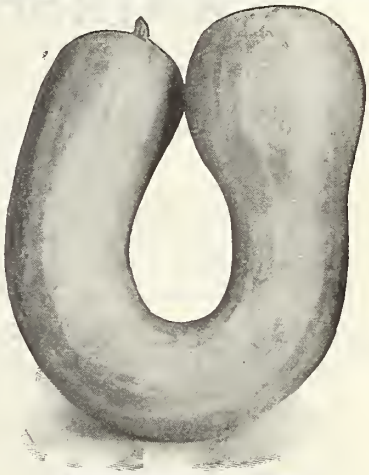
Large Bell or Bull Nose Peppers

PUMPKIN

While pumpkins are of strong growth, they will not stand frost, and cannot be planted until about April 15th. A moderately rich soil is sufficient for good pumpkins. Plant in hills about eight feet apart. Three to four pounds of seed will plant an acre, and eight ounces will plant 100 hills. Do not plant near squashes or melons, they are likely to mix. If large quantities are wanted write for special price.

Mammoth King

Small Sugar



Mammoth Golden Cushaw

CALIFORNIA FIELD The well known, ordinary pumpkin, largely used for stock feeding. The fruit is variously colored, in yellow, drab, red and orange, and varies also in size, but is usually very large. Is a heavy cropper and very easily grown. **Pkt. 5c; lb. 40c; 10 lbs. $3.50; 100 lbs. $25.00.**

CONNECTICUT FIELD A fine, large, orange-colored variety used for field culture and stock feeding. The skin is smooth and ribbed and the flesh is brittle and sweet. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 40c; 10 lbs. $3.50.**

Large Cheese, or Kentucky Field. A very large, flattened pumpkin, averaging about two feet through. When ripened the skin is a rich cream color. Flesh yellow and of fine quality. Some customers claim that this variety is not susceptible to the ravages of the squash bug. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 65c.**

Mammoth Golden Cushaw. One of the best stock-feeding pumpkins. Is a solid, yellow crookneck sort and is nearly all flesh, having a very small seed cavity. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 95c.**

MAMMOTH KING OR POTIRON
The best large pumpkin in use. Forms immense globular melons, flattened a little at the end. Skin reddish yellow in color, and flesh rich orange. This is unquestionably the very best mammoth pumpkin we have. It runs very uniform in shape and color, and all are of immense size. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

MORSE'S MARROW Our wonderful new heavy-cropping pumpkin introduced last year for the first time. See page 10.

Pie Pumpkin. A small, round, yellow sort, with fine, pinkish netting. Flesh is thick, sweet and of excellent quality. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c, postpaid.**

SMALL SUGAR or NEW ENGLAND PIE. A small round pumpkin of excellent quality. The flesh is rich yellow, very thick and sweet, and the skin is deep orange. We recommend this variety as the very best for pies. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c, postpaid.**

Connecticut Field

RHUBARB

A rich, sandy soil, wet but well drained, is best for rhubarb. While it is frequently propagated from seed, only a percentage comes true, but it is cheaper to grow from seed and discard untrue plants. The popular method, however, is to use young plants propagated from the crown. Set plants three feet by six. The best stems are produced the second year, but it continues to produce for several years. When the blossom stalk appears, it should be cut back well into the ground. Set the crowns of the plants so that they are two inches under the surface of the soil. Choose a place where the soil will be moist at all times.

If Rhubarb roots are ordered by mail, add postage at zone rates.

CRIMSON WINTER The new variety which has become very popular and profitable to the growers, is of delicious flavor, extremely hardy, very prolific and very quick growing. Produces small stems very early in winter and spring and continues bearing till late.

Seed—Pkt. 10c; oz. 80c; ¼ lb. $2.40; lb. $8.00.
Small Roots—10c each; per doz., $1.00; per 100, $6.50. Weight estimated 2 lbs. per dozen.

Myatt's Victoria. A very large, late variety with green stalks. It comes fairly true from seed.
Seed—Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.25.
Roots—15o each, $1.50 per dozen. (Weight estimated 2 lbs. per doz.)

STRAWBERRY (Lorenzo). A variety well adapted for California, and yielding very heavy crops. Largely planted for market purposes in San Lorenzo; stems large size; color light crimson.
Large Roots—25c each; 5 for $1.00; per 100, $12.00.
(Weight estimated 1 lb. each.)

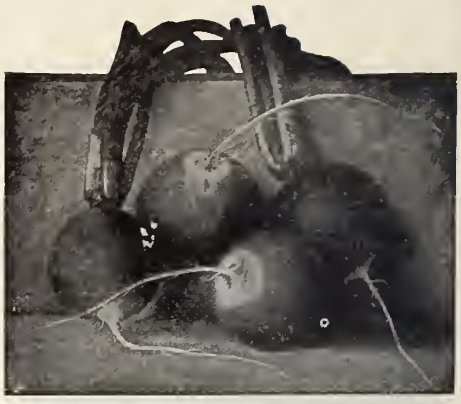
WAGNER'S GIANT (Giant Crimson Winter). The grower describes this as "about twice the size of Burbank's Giant Winter, and four times the size of the smaller sorts of rhubarb. Average stem is 1½ feet long and weighs ¼ lb." This novelty has all of the good qualities of Crimson Winter plus large size. A sure money maker and the very best variety.
Seed—Pkt. 15c; oz. $1.25; ¼ lb. $3.75; lb. $12.00.
Roots—20c each; $1.75 per doz. (Estimated weight, two lbs. per doz.)

Morse's RADISH SEED

Being a root crop, good brittle radishes require light, well-worked soil, made very rich and mellow to insure quick growth. If permitted to grow slowly, they become tough and pithy. They are easy to grow and frequent plantings will insure a constant supply for the table. Use two-thirds ounce for 100 feet of row, and thin the very young plants somewhat to prevent crowding. Summer varieties can be sown all spring and well into summer. Winter varieties, however, require some time to mature, and the seed should be planted in August and September for good radishes in November and December.

Chartier. A very long variety and larger in diameter and general size than Long Scarlet. Keeps hard and crisp longer than most varieties, and is an excellent garden sort. Color bright rose with lighter colored tip. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

Chinese Rose Winter. A bright scarlet winter variety. About four inches long and stump-rooted. Like Chinese White Winter, only red colored and two weeks earlier. **Pkt. 5c; oz. 15o; ¼ lb. 30c; lb. 80c.**



Scarlet Turnip White Tipped Radish

CHINESE WHITE WINTER or CELESTIAL (or Cal. Mammoth White Winter). The well-known and popular winter variety. Clear white, about four inches long and half stump-rooted. Keeps firm and crisp until it runs to seed. Is a good cooking variety, and when cooked the flavor resembles turnip. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

CRIMSON GIANT FORCING

A fine solid radish, a little larger than Scarlet Globe; very crisp. We recommend our selection of this as being an extra good radish. It is top-shaped. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Early Scarlet Turnip. A valuable variety for forcing or outdoor culture. Is a small, turnip-shaped variety, and in color entirely crimson. **Pkt. 5o; oz. 10c; ¼ lb. 20c; lb. 60c.**

French Breakfast Radish

EARLY SCARLET GLOBE

A popular forcing variety, owing to its very quick growth and fine, bright scarlet color. Shape a trifle oblong. **Pkt. 5c; oz. 10o; ¼ lb. 30o; lb. 80c.**

French Breakfast. Color, bright rose with bottom of root and the tail pure white; two inches long. **Pkt. 5c; oz. 10c; ¼ lb. 25o; lb. 75o.**

Radish Icicle

HALF LONG, OR OLIVE SHAPED. The variety most largely used by gardeners in California. It is about three inches long with half stump-root and sloping top. Color, carmine. Quick growing; hardy. Remains solid longer than any other variety. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Half Long Deep Scarlet. Bright scarlet. Valuable for forcing. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

ICICLE A handsome white variety, about five inches long, with sloping top and pointed root. Quick growing, brittle and mild in flavor. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c.**

Long Black Spanish. A winter variety with almost black skin and white flesh. Roots about six inches long. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75o.**

LONG SCARLET (short top). The best known and most popular long variety. Color, bright carmine, and flesh brittle and firm. About six inches long, the top growing out of the ground about one inch. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Long White Japanese. A winter variety, growing frequently two feet long and about three inches in diameter. Skin, white; flesh, solid and tender; very pungent. Our seed is imported from Japan. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.50.**

Round Black Spanish. A winter variety, with black skin and white flesh. Top shaped, almost globular. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c.**

SCARLET TURNIP WHITE TIPPED or Rosy Gem. One of the most popular and attractive short varieties. It is globe shaped, bright rose-carmine with bottom and tip clear white. Stems and leaves small. Very valuable for forcing as well as for the garden and market. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 70c.**

White Strasburg. A large, white variety for late summer use. Rather thick at the shoulder and tapering to about five inches in length. Keeps firm and solid a long time. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 80c.**

White Vienna (or Lady Finger). A very fine long, white variety; quick growing and ready for use when very young. The flavor is mild and sweet. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 80c.**

Salsify—Mammoth Sandwich Island

SAGE

A hardy perennial shrub, with whitish-green, oval and very much wrinkled leaves, which have a pleasant smell and which are used for seasoning. It is easily grown and the seed can be sown almost any time. Its fragrant, purplish flowers are especially attractive to bees, and the finest white honey has its source in wild sage blossoms. **Pkt. 5c; oz. 25c; ¼ lb. 60c; lb. $1.75.** Other herbs are on page 49.

SALSIFY, OR VEGETABLE OYSTER

The salsify root, which grows about 12 inches long and one inch in diameter, is becoming a very popular vegetable. When cooked it has a distinct flavor of the oyster, and may be served in a great variety of ways. A loose, light soil, especially sandy loam, is desirable for a long, smooth root. In stiff soils the roots are usually uneven and hard to dig. Use one ounce for 100 feet of row, and thin to two inches to prevent crowding. Plant in 12-inch to 15-inch rows.

MAMMOTH SANDWICH ISLAND. The improved, large-rooted variety, growing about 12 inches long and being from one to two inches thick, **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.00.**

SORREL

The large leaves when cooked like spinach make a very palatable vegetable. In California it grows luxuriantly, spreads rapidly from the root, and becomes an obnoxious weed unless given attention. A confined location in the garden is therefore recommended.

Large Leaved French. The variety having the largest leaves and therefore the most desirable. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**

SPINACH

An easily grown plant, the seed of which may be planted in the fall to secure good spinach early in the spring or even throughout the winter. The better and richer the soil, the larger and more tender the leaves will be. As a field crop for the market garden use eight pounds of seed per acre. For the home garden use one ounce for 100 feet of row.

BLOOMSDALE SAVOY The variety most generally used in the East and especially throughout the South for shipping. Leaves large, round and thick, very much savoyed and rich deep green. One of the earliest varieties. Seed round. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

SPINACH

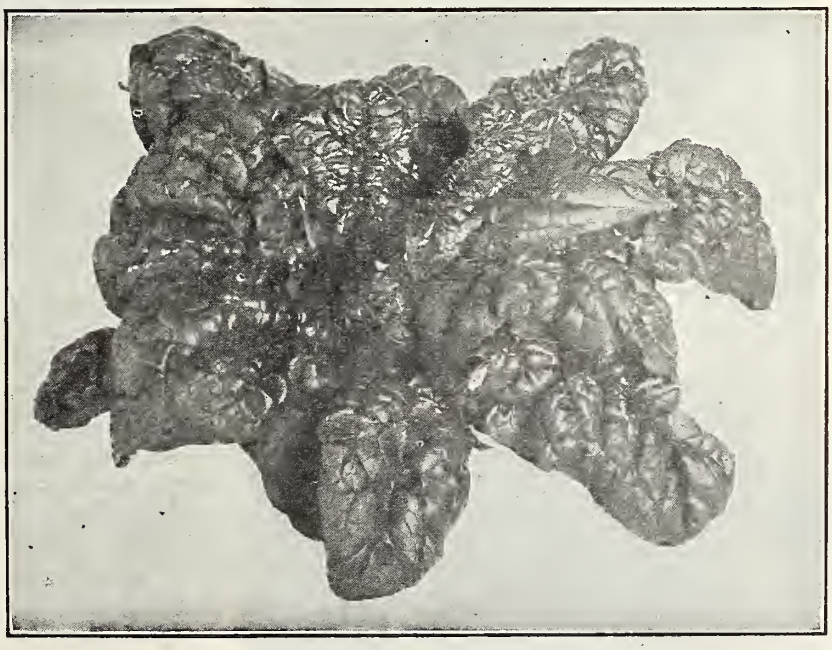
Long Standing. A deep green variety, with rather elongated smooth leaves. Seed round. Stands a long time without running to seed even in hot weather. **Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. 95c.**

Victoria. A long-standing variety with round, slightly savoyed leaves. Deep green and hardy. Forms good edible leaves early, and continues to produce leaves for a long period. **Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. 95c.**

New Zealand. A plant with thick, fleshy texture and soft crystalline leaves. Is not like the ordinary spinach in appearance, but it is used in the same way. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.25.**

PRICKLY The variety commonly used for market in California. Is very hardy and easily grown; bears large, smooth leaves, which are shaped like an arrow point. Color bright green. Seed irregular, with three or four sharp points. A fine winter and spring variety. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

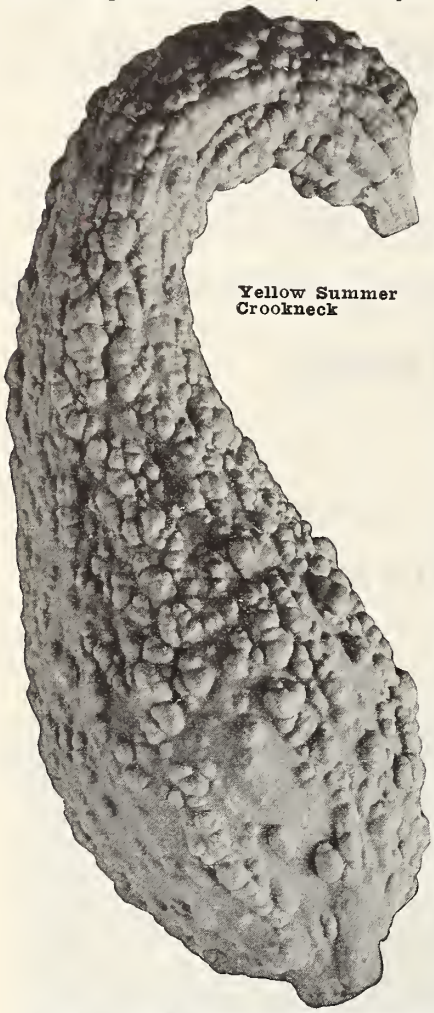
Round, Thick Leaved. A large-leaved bright green variety. Leaves rather smooth and rounded at the top. A good variety for late spring and summer. Seed round. **Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. 95c.**



Bloomsdale Savoy Leaved Spinach

SQUASH

The **summer varieties** come into use early in the summer, but being sensitive to frost the seed cannot be sown until late in April. The seed should be planted in hills four feet apart, using four ounces to 100 hills. The winter varieties are also unable to resist frost, and should be planted at the same time. The fruit does not mature until late in the fall, and, having a very firm, hard shell, keeps well, and with a little care squashes can be had all winter and until late in the spring. In gathering winter squashes, it is important to protect the stems, since, if broken off, the fruit will not keep so well. Plant in hills six to eight feet apart, using two or three seeds to the hill. Use eight ounces to 100 hills, or two pounds to an acre. Moderately rich soil will grow good squashes.



Yellow Summer Crookneck

SUMMER VARIETIES

EARLY WHITE BUSH SCALLOP A very early variety, with flat, creamy white, scalloped squashes, 4 to 6 inches in diameter. The vine is bush in habit and rather dwarf. This variety is the common "patty pan" squash. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Mammoth Summer Crookneck. A large golden-yellow variety, thickly warted; is eighteen inches long, brittle and tender. Plants are bush and very prolific. This is an improved strain of the old variety and considerably larger. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c.**

VEGETABLE OR ITALIAN MARROW **COCOZELLE BUSH.** The very earliest of all the Squashes. Although usually eaten when quite small still it is good for the table when nearly full grown; has a distinct flavor. The color is dark green at first, but changes to a lighter green as it matures. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

White Summer Crookneck. Long, crooknecked variety, similar to Summer Crookneck in size and shape, but it is pure white. Is of especially fine quality. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

YELLOW SUMMER CROOKNECK

The well-known Summer variety. Fruit long, skin very much warted; bright golden yellow. Very fine and tender when young. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

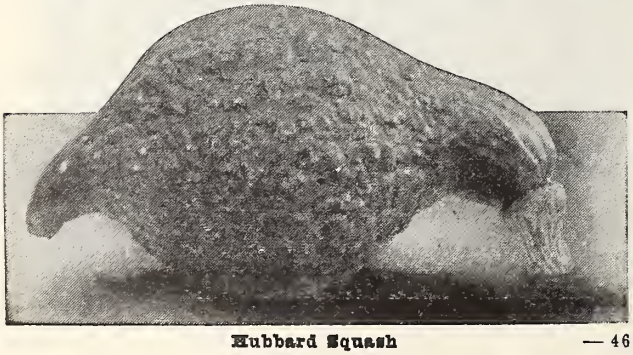
White Bush Scallop Squash

WINTER VARIETIES

BOSTON MARROW

A popular variety, with large, oval fruit. Skin bright reddish orange with light cream netting. Flesh orange. Fine grained and of excellent quality. This is the most popular variety for canning. The California canners plant several hundred acres annually and the fruit makes a rich orange-red, and delicious flavored dish. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Delicious. This is a splendid variety, more like the Hubbard than any other, but surpasses it in some respects for home use, as it is not quite so large. The shell is not so hard, the meat is thicker and of extra fine quality. **Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. $1.25.**



Hubbard Squash

Essex Hybrid, or Hard Shell Turban. An early quick-growing variety, with very hard shell. Is broad, with large nick or "Turk's Cap" at blossom end. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Fordhook. A good variety for early winter or even summer use. The fruit is oblong, slightly ridged; is creamy yellow outside and the flesh is thick, and when cooked is of most delicious flavor. Is solid and hard and is a splendid keeper. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 90c.**

Golden Hubbard. An exceptionally attractive variety of the true Hubbard type. At maturity the color is red and the flesh bright orange. The vine is productive and the fruit is fit for use earlier than the Hubbard. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

HUBBARD The most popular and widely used of the winter squashes. Fruit is oblong and pointed, heavily warted, dark green in color, with orange-colored flesh. Is remarkable for its keeping qualities. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

Perfect Gem or Cream. Long-keeping winter squash, 4 to 6 inches in diameter; apple-shaped, distinctly ribbed; with smooth, cream-colored skin. Is solid and rather hard, but bakes to a delicious soft consistency on the inside. Although a small variety, it is a great keeper and is used mostly in the winter. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 85c.**

Mammoth Chili. A very large variety with smooth, oblong fruit, flattened at both ends. Skin rich orange-yellow; flesh, orange, fine grained and sweet. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

TOMATO

As tomatoes are very sensitive to frost, they cannot be set in the open field until about May 1st. The seed must be sown in well-protected hotbeds, sowing same about March 1st. A hardy and stocky plant is had by transplanting the small plants in the bed a few weeks before transplanting to the field. Or when about four inches high the top may be pinched off and the plant grows stockier.

Sow the seed broadcast, using one ounce to about 30 square feet of area, which will yield plants enough to set an acre. In the field set tall varieties six feet apart and dwarf varieties four feet apart. A slight trellis is advisable in the garden. Good soil produces the best fruit, but it is not necessary that it be excessively rich. Too frequent watering, especially spraying the plant, is injurious to tomatoes in the home garden, but a moderate amount of water should be applied at the roots at regular intervals.

Beauty. A rather early, tall variety; very prolific, with a good-sized, smooth fruit of a purplish carmine color. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.25.**

Bonny Best. An early scarlet-fruited tomato which has proven a success all over the country. It is smooth, very even in size, very solid and also very prolific. **Pkt. 10c; oz. 30c; ¼ lb. 90c; lb. $2.75.**

CHALK'S EARLY JEWEL A wonderful new variety in that it is early and bears continuously throughout the season. The fruit is large, smooth, uniform and well ripened clear to the stem, and the flavor and quality are especially fine. Color bright scarlet. **Pkt. 10c; oz. 25c; ¼ lb. 85c; lb. $2.75.**

Dwarf Champion. A dwarf variety, sometimes called the tree tomato on account of its upright growth and its ability to stand alone without trellising. Fruit medium-sized, smooth, uniform and of a purplish-carmine color. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**

Dwarf Giant. Dwarf plant and giant fruit. The fruit has the mild sweet flavor of Ponderosa, is also large and meaty, with very little core. It is deep purplish-crimson in color and belongs to the later-fruiting types. **Pkt. 10c; oz. $1.00; ¼ lb. $3.00; lb. $10.00.**

Earliana (Sparks). The earliest tall variety. The fruit is large, smooth, of a bright scarlet color and of fine quality. Very valuable for early market use. **Pkt. 10c; oz. 35c; ¼ lb. $1.00; lb. $3.25.**

EARLY DETROIT. A new tomato of merit; fruit smooth, uniform, nearly globe shaped, firm and of fine quality; color purplish-pink; season early. Is a fine shipping variety. **Pkt. 5c; oz. 35c; ¼ lb. $1.00; lb. $3.50.**

Golden Queen. A large-fruited, tall variety, bearing smooth, bright yellow fruit of fine quality. **Pkt. 5c; oz. 35c; ¼ lb. $1.00; lb. $3.50.**

Husk Tomato, or Ground Cherry. A small variety that is covered by a loose covering or husk. The true edible variety is yellow and is used for preserves. **Pkt. 5c; oz. 30c; ¼ lb. 90c; lb. $3.00.**

JOHN BAER. An early bright scarlet new tomato. It is similar to Bonny Best and Chalk's Early Jewel; prolific and of best quality. **Pkt. 10c; oz. 50c; ¼ lb. $1.50; lb. $5.00.**

Perfection. A tall variety, with medium-sized globular, uniform fruit, which is smooth and well ripened to the stem. Color bright scarlet. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.25.**

Ponderosa. An extremely large, irregular-fruited variety. Vine tall and fruit very solid, and purplish-carmine in color. Rather coarse and of fair quality only. **Pkt. 10c; oz. 40c; ¼ lb. $1.00; lb. $3.50.**

Red Cherry. **Pkt. 5c; oz. 30c; ¼ lb. 90c; lb. $3.00.**

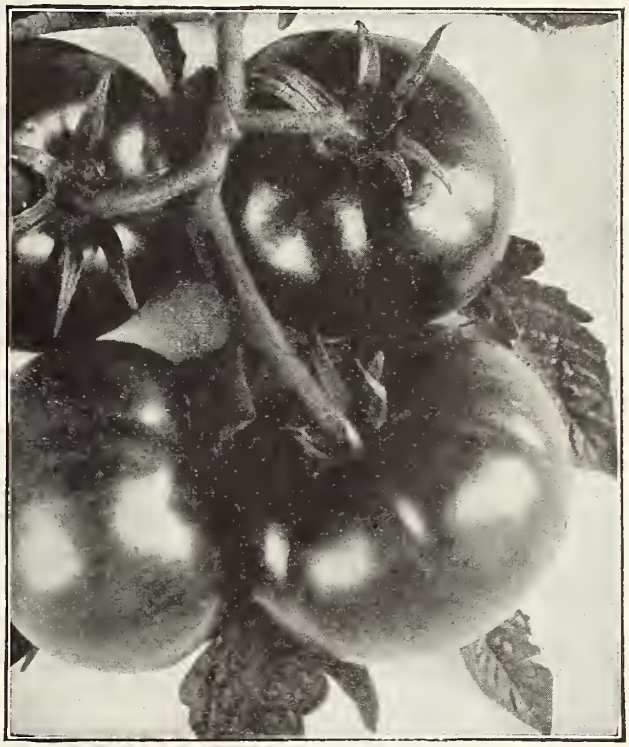
Red Pear Shaped. As the name implies, the fruit is shaped like a pear—small at the stem and enlarged at the top. It is small, being about two inches long. Color scarlet. **Pkt. 5c; oz. 35c; ¼ lb. $1.00; lb. $3.50.**

SAN JOSE CANNER Morse's. A grand novelty introduced and recommended by us. As the name implies, this is the favorite canning tomato in the large district to the south of us. San Jose Canner is scarlet in color, of large size, and yields an enormous tonnage. **Pkt. 10c; oz. 60c; ¼ lb. $1.80; lb. $6.00.**

MATCHLESS There is no better tomato grown than Matchless, with its large fruit, smooth and uniform. Color bright cardinal red. A heavy cropper and of excellent flavor. Equally good for the home garden, for canning and for market. **Morse's extra selected strain. Pkt. 10c; oz. 30c; ¼ lb. 90c; lb. $3.**

STONE The best main-crop tomato for all purposes, and largely used for canning. Vine tall and prolific. Fruit smooth, large and uniform. Color bright scarlet. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.25.**

TROPHY. An old favorite and much esteemed for its productiveness and hardiness. The fruit is somewhat irregular, but of fine quality, and is valuable for canning. The true stock is scarlet in color and the fruit shows a distinct navel at the blossom end. **Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. $2.00.**



San Jose Canner Tomato

Yellow Cherry. A small-fruited, bright golden-yellow variety; very attractive for salads or preserves. **Pkt. 5c; oz. 30c; ¼ lb. 90c; lb. $3.00.**

Yellow Pear Shaped. A small-fruited variety, which is golden-yellow. It is very useful for salads, when the fruit is simply cut in two lengthwise. **Pkt. 5c; oz. 30c; ¼ lb. 90c; lb. $3.00.**

An unsolicited letter from the head of a large canning firm who planted Morse's New Tomato this year reads:

Our field man just brought in a picking off of the SAN JOSE CANNER TOMATO seed you sent us and they surely are a winner. He picked a few at the first picking, but today took two average vines and brought in twenty-two pounds off the two vines of uniform, large, well colored, solid meated, beautiful fruit. This figures (2600 vines to the acre) fourteen tons at one picking. He says that he never saw such a heavy crop of Tomatoes, and if he had four acres he don't know how he could get them picked and hauled off.

The boxes weigh sixty pounds net to the bushel, about eight pounds heavier than the Stone.
We shall plant a good acreage of SAN JOSE CANNER this coming year.

TOBACCO

Sow early in frames or seed beds and transplant when weather has become warm and frost has passed. Set in 4-ft. rows, 30 in. apart.

CONNECTICUT SEED LEAF. Is the hardiest variety in cultivation. **Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. $2.50.**
Havana (Domestic). Pkt. 10c; oz. 40c; ¼ lb. $1.20; lb. $4.00.
Vuelto de Abajo (Imported Havana). Pkt. 15c; oz. $1.50.
White Burley. Pkt. 5c; oz. 30c; ¼ lb. $1.00; lb. $3.00.
Yellow Pryor. Pkt. 10c; oz. 35c; ¼ lb. $1.00; lb. $3.50.
Kentucky Yellow. Pkt. 10c; oz. 35c; ¼ lb. $1.00; lb. $3.50.
Turkish. Pkt. 15c; oz. $1.00.

TURNIPS

While turnips are a favorite fall and winter vegetable, they may also be had in spring by proper sowings. They are of easy culture, but need well-worked, rich soil to insure a quick uninterrupted growth, when they will be tender and free from woodiness.

For fall and winter use sow in August, in rows 10 to 18 inches apart, using one ounce to 250 feet of row, thinning the plants when very young to three or four inches apart. For spring use sow in January.,

For field culture sow in rows two feet apart, using two to three pounds of seed per acre.

Amber or Yellow Globe. Skin is a clear yellow. Is of large size and fine flavor. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 65c.**

Cow Horn. A long, pure white variety, resembling a white carrot more than a turnip. The flesh is tender and sweet, and it is quite popular as a market variety on this account. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Early Snowball. A medium globe-shaped variety of pure white. Very solid and of the best quality. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c.**

EARLY WHITE FLAT DUTCH (Strap Leaf)

A medium-sized flat variety; clear white, early, and of fine flavor. A fine table variety. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 70c.**

Extra Early White Milan. A very early variety, medium sized, flat and clear white. A fine home-garden variety. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.50.**

Extra Early Purple Top Milan. A very early variety, medium sized, very flat, and white with purple top. **Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. $1.40.**

Orange Jelly, or Golden Globe. A globe-shaped, yellow variety, with firm and crisp yellow flesh. A very fine table variety. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 65o.**

PURPLE TOP FLAT DUTCH (Strap Leaf)

An early flat variety. White with purple top. Probably the most popular and generally used garden variety. It matures quickly and has fine grained flesh of mild flavor. In Colombo Market, where the vegetables for San Francisco are handled, you will see more of Purple Top Flat Dutch than of any other sort. It forms early a fine root, even in shape, and of best quality. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 65c.**

PURPLE TOP WHITE GLOBE

A valuable turnip for either table use or stock feeding. Roots globe-shaped, white with purple top. Flesh white, firm and tender. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Purple Top Yellow Aberdeen. A medium-sized variety, generally used for stock feeding. Is yellow, with purple top. Flesh light yellow. **A winter variety,** seed of which can be sown in summer. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Large White Ruta Baga

Pomeranian White Globe. Large white variety, used largely for stock feeding. Is globe-shaped; large leaves; hardy. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Seven Top (for greens). Cultivated for its leaves. Cooked same as spinach and mustard. The root is small and not used. **Pkt. 5c; oz. 10o; ¼ lb. 25c; lb. 75c.**

White Egg. A small, oval-shaped turnip, with pure white skin and white, fine-grained flesh. A handsome variety and very early. **Pkt. 5o; oz. 10c; ¼ lb. 25c; lb. 65c.**

Turnip—Purple Top, White Globe

"Turnips are well adapted to winter gardening in California, and, if pushed to maturity, they will be found very tender and delicious."—Prof. Wickson in California Vegetables.

RUTA BAGA, OR SWEDES

These are grown very extensively for stock feeding and make an excellent and valuable crop. Treatment same as for winter turnips, but require a longer season to grow, and the seed should be planted early in July. The rows should be at least two and one-half feet apart, and the plants thinned to eight or twelve inches. The roots frequently grow to enormous size.

AMERICAN PURPLE TOP OR LONG ISLAND

One of the best and most popular varieties, with yellow flesh. It is yellow below ground, with purple top above, and the leaves are small. A good stock feeding or table variety. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 65c.**

LARGE WHITE, or SWEET GERMAN. A very large variety, with white skin and white flesh, which is tender and sweet. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Monarch, or Tankard. Roots ovoid in shape and very large. Flesh, yellow; skin, yellow below ground and purple above. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Yellow Purple Top Swede. The well-known and most commonly used variety. Roots, globular; skin, yellow under ground and purple above. Flesh of fine flavor. Valuable for either table use or stock feeding. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 65c.**

AROMATIC, MEDICINAL and POT HERBS

Anise. A hardy annual. The seed especially being used for seasoning food, also for flavoring liquors and for medicinal purposes. Grows about two feet tall. Sow the seed where the plants are to stand. **Pkt. 5c; oz. 15c; ¼ lb. 30c.**

Balm. A perennial herb used for seasoning, especially in liquors. Has a lemon-like flavor. Thrives in any warm location and is easy to grow. Plant grows one to two feet high. **Pkt. 5c; oz. 25c; ¼ lb. 75c.**

Basil, Sweet. A hardy annual, the leaves of which have a clover-like flavor. Used for seasoning soups, meats and and salads. Of the easiest culture. Seed can be sown as early as the weather permits. **Pkt. 5c; oz. 15c; ¼ lb. 50c.**

Bohnenkraut is Summer Savory.

Borage. The leaves are used for flavoring and the flowers furnish bee pasture. **Pkt. 5c; oz. 10c; ¼ lb. 35c.**

Caraway. A blennial herb, grown for its seeds, which are used for flavoring breads, cakes and cheese; also occasionally for the young shoots and leaves, which are eaten. Grows two feet high. Is of easy culture. Sow the seed in the Spring for seed crop the following year. **Pkt. 5c; oz. 10c; ¼ lb. 30c.**

Catnip. Practically a wild plant. Is a hardy perennial, the leaves of which are used for medicinal purposes. **Pkt. 10c; oz. 60c; ¼ lb. $1.75.**

Coriander. An easily grown herb, the seeds of which are used for flavoring pastry, confectionery and liquors. Grows two to three feet high. **Pkt. 5c; oz. 10c; ¼ lb. 30c.**

Dill. An annual herb, the seeds of which are used for seasoning. The foliage is also used for flavoring as well as for medicinal purposes. Grows two to three feet high. Its largest use is pickling cucumbers in what is known as "Dill Pickles." **Pkt. 5c; oz. 10c; ¼ lb. 25c.**

Fennel, Sweet. A hardy perennial, the leaves of which are used in soups, garnishes and salads. The seed should be sown early and plants thinned to six or eight plants to foot of row. **Pkt. 5c; oz. 10c; ¼ lb. 30c.**

Horehound. A hardy perennial shrub, one to three feet high, with whitish, hairy leaves, which are used in confectionery and in medicines for coughs and colds. **Pkt. 5c; oz. 25c; ¼ lb. 75c.**

Hyssop. A hardy perennial shrub, growing 18 inches high. Used for medicinal purposes, both green and dried. **Pkt. 5c; oz. 25c; ¼ lb. 75c.**

Sweet Marjoram. A half-hardy perennial, the leaves of which are used, both green and dried, for flavoring or seasoning. **Pkt. 5c; oz. 20c; ¼ lb. 50c.**

Lavender. A hardy perennial, growing two feet high and forming a bush about four feet in diameter. Used as a garden plant on account of its fragrant blossoms and foliage. Its long, fragrant stems are frequently used for fancy work when dried. **Pkt. 5c; oz. 20c; ¼ lb. 60c.**

Rosemary. A hardy perennial shrub, the leaves of which are used for seasoning and medicinal purposes. Oil of Rosemary is distilled from the leaves. **Pkt. 5c; oz. 35c; ¼ lb. $1.00.**

Rue. A hardy perennial, thriving on poor soil. Has a peculiar smell; leaves are bitter. Is used as a stimulant but should be used with caution, since its use sometimes results in injury. **Pkt. 5c; oz. 30c; ¼ lb. 90c.**

Sage. A hardy perennial shrub, with whitish-green, oval, and very much wrinkled leaves, which have a pleasant smell and which are used for seasoning. It is easily grown and the seed can be sown almost any time. Its fragrant, purplish flowers are especially attractive to bees, and the finest white honey has its source in sage blossoms. **Pkt. 5c; oz. 15c; ¼ lb. 40c.**

Summer Savory. A hardy annual, the stems and leaves of which are used for flavoring dressings and soups. **Pkt. 5c; oz. 15c; ¼ lb. 45o.**

Winter Savory. A hardy perennial, the leaves of which are used for seasoning. **Pkt. 5c; oz. 20c; ¼ lb. 60c.**

Tansy. A very easily grown perennial plant, growing about three feet high. Its leaves are used for medicinal purposes. **Pkt. 5o; oz. 35c; ¼ lb. $1.00.**

Tarragon. The leaves are used for seasoning. The plants continue to bear leaves for a long period. The true Tarragon does not seed, but what is offered is Russian Tarragon and flavorless. True Tarragon in plants below. Russian Tarragon, **pkt. 10c.**

Thyme. A low-growing, half-shrubby perennial, with fragrant leaves, having a mint-like odor, which are used for seasoning. **Pkt. 5c; oz. 40c; ¼ lb. $1.25.**

Wormwood. A hardy perennial, growing about four feet high. The leaves, which are greatly divided, have a strong, bitter flavor. They are gathered in the Summer and dried, and are largely used in medicines for tonics and applications. Also used in liquors, especially absinthe. **Pkt. 5o; oz. 20c; ¼ lb. 60c.**

Herb Plants. From January until June 1 we can supply plants of the following herbs: Chives, Mint, Sweet Marjoram, Sage, Thyme. Two plants of any kind or assorted for **25c; postpaid, 35o.**
Tarragon plants from January to May 1, **each 25c; postpaid, 30c.**

BURBANK SPINELESS CACTUS

We can supply the genuine Burbank Spineless Cactus which has brought Mr. Burbank so much fame. Varieties and descriptions are given on page 115, which see. Only the genuine Burbank sorts are carried, and the stock we offer came originally from the Burbank grounds.

BIRD SEEDS

Canary, Hemp, Millet, Rape and Sunflower, either separate or in mixture. We can supply in any quantity. Write for prices.

VEGETABLE PLANTS AND ROOTS

We carry the following plants in the season shown and pack them very carefully for shipping. The purchaser takes the risk of their wilting or being damaged in transit.
Postal charges at parcels post rates must be added, if wanted by mail. (See page 2.)

Artichoke Plants. January to May. **Doz. $1.25. Weight, 6** lbs. per dozen, really too heavy to mail.

Asparagus Roots. Two years old. January to April. **Doz. 25c, postpaid** (weight 4 lbs. per 100); **100 $1.10; $6.00 per 1000.**

Cabbage Plants. Dwarf Flat Dutch variety only is carried. October to June. **Doz. 15c; 100 85c; 1000 $6.00.** (Weight 1 lb. per dozen; 4 lbs. per 100.)

Cauliflower Plants. California Wonder variety only is carried. November to June. **Doz. 20c; 100 $1.00; 1000 $7.00.** (Welght, 1 lb. per dozen.)

Celery Plants. March to May. **Doz. 20c; 100 $1.25.** (Welght, 1 lb. per dozen; 4 lbs. per 100.)

Egg Plant. March 15th to May 15th. **Doz. 25o.** (Welght, 1 lb. per dozen.)

Garlic. November to May. **30c per lb; 10 lbs. $2.50.** Postpaid to Fourth Zone.

Horse Radish Roots. January to May. **Doz. 50c, postpaid; 100 $1.50.**

Pepper, Large Bell. March 15th to May. **Doz. 25c; 100 $1.50.** (Welght 1 lb. per dozen.)

Pepper, Cayenne. March 15th to May. **Doz. 25c; 100 $1.50.** (Weight, 1 lb. per dozen.)

Rhubarb Roots. See full list of varieties under Rhubarb on page 43.

Rhubarb Roots, Strawberry. Each 25c; 5 for $1.00; per 100 $12.00. (Weight, 2 lbs. each root; 12 lbs. per dozen.)

SHALLOTS. Until May 1st or sold out. **Lb. 30c.** Postpaid to Fourth Zone.

Sweet Potatoes. April to June. **Doz. 20c; 100 $1.00; $5.50 per 1000.** (Weight, 1 lb. per dozen; 2 lbs. per 100.)

Tomato, Extra Early Plants. March. **Dcz. 25c.**

Tomato, Stone, etc. April to June. **Doz. 20c; 100 $1.25.** (Welght, 1 lb. per dozen; 3 lbs. per 100 taken from flats.)

HERBS, Chives, Mint, Sage, Sweet Marjoram, Thyme, from January 1 to June 1. Two plants of any kind or assorted for **25c; postpaid, 35c. Tarragon** until May 1, **25c each.**

PLANTING FOR MORSE'S

Variety	Quantity of Seed for 100 ft. of Row	Quantity of Seed Needed for 1 Acre Field Culture	General Time of Sowing where Winters are Cold	Time of Sowing about San Francisco and Central Cal.
ARTICHOKE	½ oz. (3 pkts.)	6 oz. T.	Early Spring	September to January. T.
" Plants (Globe)	17 plants	2904 plants	Spring	January to March
" (Jerusalem)	3 lbs	5-7 sacks	Spring	February to May
ASPARAGUS (Seed)	1 oz	1 lb. in seed bed. T.	Early Spring	February to April. T.
" (Plants)	50	1,800-3,000	Early Spring	December to April
BEANS, Bush	About 1 lb	50	Late Spring	April to August. S.
" Pole	8 oz	25 lbs	Late Spring	April 15th to August. S.
BEETS	2 oz	5 lbs	Spring	All year round. S.
BROCCOLI	¼ oz. (1 pkt.)	2-3 oz. T.	Spring	January to May
BRUSSELS SPROUTS	¼ oz. (2 pkts.)	2-3 oz. T.	Early Spring	January to March—July to August. T.
CABBAGE	¼ oz. (2 pkts.)	2-3 oz. T.	Early Spring	January to April—July to October. T.
CARROT	1 oz	2½ lbs	Spring	All year round. S.
CAULIFLOWER	¼ oz	2 oz. T.	Early Spring	June to January
CELERY	¼ oz. (2 pkts.)	2 oz. T.	Spring (rather late)	January to June. T.
CHERVIL	1 oz		Early Spring	February to May
CHICORY	¼ oz. (1 pkt.)	4 lbs	Early Spring	February to April
COLLARDS	¼ oz. (1 pkt.)	2-3 oz. T.	Early and Late Spring	All year round
CORN SALAD	2 oz		Early Spring and Late Summer	March and April—Sept. to Nov.
CORN	1½ lbs. per 100 hills	15 lbs	Late Spring	April 20th to July 15th
CUCUMBER	½ oz. (2 pkts.)	3 lbs	Late Spring	April 15th to June 15th
DANDELION	¼ oz. (4 pkts.)		Spring	May and June
EGG PLANT	⅛ oz. (1 pkt.)	4 oz. T.	Early Spring in Hot-bed	February to April. T.
ENDIVE	1 oz	4 lbs		July to October
HORSE RADISH	70 roots		Spring	January to May
KALE	¼ oz. (1 pkt.)	2 lbs	Spring	January to April—July to October
KOHL RABI	¼ oz. (1 pkt.)	4 lbs	Early Spring	January to May—July to October
LEEK	½ oz	4 lbs	Early Spring	January to March
LETTUCE	½ oz. (3 pkts.)	4 lbs	Early and Late Spring	All year round. S.
MUSKMELON	½ oz. (3 pkts)	3 lbs	Late Spring and Early Summer	April 20th to June
WATERMELON	1 oz	2-4 lbs	Late Spring	May to June
MUSTARD	¼ oz. (1 pkt.)	2-3 lbs	Spring	February to May
OKRA		8 lbs	Late Spring	April 15th to June
ONION	½ oz	4 lbs	Early Spring	November to March
PARSLEY	¼ oz. (1 pkt.)	3 lbs	Spring	All year round
PARSNIP	¼ oz. (2 pkts.)	3 lbs	Early Spring	March to June
PEAS	2 lbs	60-125 lbs	Early and Late Spring	All year round. S.
PEPPER	⅛ oz. (1 pkt.)	3 oz. T.	Early Spring in Hot-bed	February to March. T.
POTATO, Irish	5 lbs	5-6 sacks	Late Spring	January to May
" Sweet	75 slips	9,680 plants	Late Spring	
PUMPKIN	½ oz. (2 pkts.)	3 or 4 lbs	Late Spring	May to June
RADISH	1 oz	10 lbs	Spring. S.	All year round. S.
RHUBARB	½ oz	1 lb	Spring	February to May. T.
" Roots	33 plants	2,420	Early Spring	January to April
SALSIFY	1 oz	8 lbs	Early Spring	February to May
SPINACH	1 oz	8 lbs	Early Spring and Fall	All year round. S.
SQUASH	½ oz. (2 pkts.)	2-3 lbs	Late Spring	May to June
TOMATO	⅛ oz. (1 pkt.)	2 oz. T.	Early Spring in Hot-beds	February to May. T.
TURNIP	½ oz. (3 pkts.)	3-4 lbs	Spring and Summer	August to April. S.

GENERAL NOTES

The information given here is as accurate as can be gathered allowing for the different ways of planting and different distances practiced in various parts of the coast. The usual distances are here given and the planter must use his judgment for his particular case. Where garden cultivation is by wheel hoe, the greater distance is better employed, and where it is by hand work, the smaller distance or even less may be better. If the patch will be cultivated by horse, the distances in the field culture column should be used.

The depth at which to plant seed cannot be given more than approximately because it varies so much with the condition of the moisture in the soil and the time of year. All seeds must have air, moisture and heat to germinate. Five times the diameter of the seed is approximately right for good conditions, but for sowing in the rainy season and in wet soils that is too deep, and for sowing the same seed in the dry season it is too shallow. For field culture, sow comparatively deep late in the spring and when the ground is becoming dry. The Seed Drill must get the seed to moist earth, and if rain is not expected it must be rolled or otherwise well firmed to get the soil packed tightly around. This will aid germination greatly. Firm only lightly, soils which are heavy or wet. Seed to be sown in dry soil may be soaked for two or three hours only in tepid water to hasten it. Such seed will not then go through a drill.

"S" placed in the column of "Time for Sowing about San Francisco and Central California," means that those sorts are sown for succession. Usually the plantings are made two weeks apart. Other sorts are often planted early and again late for crops at two different seasons.

"T," placed in the same column of "Time for sowing about San Francisco," means that those sorts are always started in boxes or beds and later transplanted.

"T," placed in the column of "Quantity of Seed Needed for 1 Acre," is to mark those sorts which are usually sown in beds and later transplanted to the garden, and always transplanted to the field. These are sown without heat or with but very little, excepting Egg Plant, Pepper and Tomato, which require heat to do well.

There is inserted a column of comparative dates for those who live in the mountains and where winters are cold.

TABLE VEGETABLE SEEDS

Variety	Crop Matures (In About)	Depth to Plant	"Field Culture" For Horse Cultivation		"Garden Culture" For Hand Cultivation	
			Put Rows Apart	Leave Plants Apart in Rows	Put Rows Apart	Leave Plants Apart in Rows
ARTICHOKE	Second spring	1"	5 ft.	3 ft.	3 ft.	2—3 ft.
" Plants (Globe)	Next spring		5 ft.	3 ft.	4 ft.	2—3 ft.
" (Jerusalem)	Late summer	2—3"	4 ft.	3 ft.	2 ft.	1—2 ft.
ASPARAGUS (Seed)	Third spring	1"	1—2 ft. in bed.	3"	1 ft.	3—5"
" (Plants)	Next spring	3—5"	7 or 8 ft.	2 or 3 ft.	2 ft.	15—20"
BEANS, Bush	45-65 days	½—2"	24—30"	4"	18—24"	3—4"
" Pole	75 days, up	1—2"	36"	4—6"	3—4 ft. hills	3—4 ft.
BEETS	65 days, up	¾—2"	20—24"	6—10"	12—18"	2—4"
BROCCOLI	90-120 days	½"	30—40"	15"	24—30"	12—18"
BRUSSELS SPROUTS	6 months	½"	30—36"	16—24"	24—30"	16—24"
CABBAGE	90-150 days	½"	30—36"	15—18"	24—30"	12—18"
CARROT	Early	½—¾"	22—28"	4"	12—18"	2"
CAULIFLOWER	110 days	¼"	30—36"	24—30"	24—30"	14—18"
CELERY	6 months	⅛"	4 ft.	6"	18—20"	6"
CHERVIL	Early	¾"	30—36"	4"	18—20"	3—4"
CHICORY	4 months	½"	30—36"	6—10"	18—20"	2—4"
COLLARDS		½"	30—36"	15—18"	18—20"	14—18"
CORN SALAD	100 days	½—1"	30"	4"	12—18"	2"
CORN	80-100 days	1—2"	36—42"	30—36"	36" hills	24—30"
CUCUMBER	120 days	1—2"	6 ft.	4—6"	4—6 ft.	4 ft. hills
DANDELION	6 months	¼—½"	30"	8—12"	18—24"	8"
EGG PLANT	160 days, up	¼"	30—36"	18—24"	24—30"	18"
ENDIVE	100 days	½—1"	30"	8—12"	18"	8—10"
HORSE RADISH	8 months	4"	30—40"	16—20"	24—30"	14"
KALE	45 days	½"	30—36"	18—24"	18—24"	18—24" or broadcast in beds
KOHL RABI	4 months	½"	24—30"	4—8"	18"	4—6"
LEEK	Late summer	½"	22—28"	5"	12—14"	4"
LETTUCE	65 days, up	¼"	22"	6—12"	15—18"	4—6"
MUSKMELON	120-140 days	1—2"	6—8 ft.	4 ft.	4 to 6 ft. hills	4 to 5 ft.
WATERMELON	120-140 days	1—2"	8—12 ft.	8 to 10 ft.	8 ft. hills	6 ft.
MUSTARD	Early	¼"	30"	4"	12—18"	3"
OKRA	2½ months	1"	4—5 ft.	24—30"	3 ft.	24"
ONION	135-150 days	½—1"	22—28"	5"	12—14"	4"
PARSLEY	Any time	⅛"	24—36"	3—6"	12—18"	4"
PARSNIP	4 months	¼—½"	24—30"	6—8"	15"	5"
PEAS	8 to 12 weeks	2—4"	24—36"	3—4"	14 and 36"	2"
PEPPER	130-150 days	¼"	24—36"	15—18"	18"	14"
POTATO, Irish	July to September	4—8"	3—3½ ft.	12—18"	30"	18" hills
" Sweet		3"	30—36"	18"	30"	10"
PUMPKIN	100-125 days	1—2"	10 ft.	8 ft.	8 ft. hills	8 ft.
RADISH	30-45 days	½"	22"	2"	12—18"	1 or 1½"
RHUBARB	Second spring	½"	6 ft.	3 ft.	12"	4"
" Roots	Next spring	3—4"	6 ft.	3 or 4 ft.	4 ft.	3 ft.
SALSIFY	5 months	½—1"	24—30"	3—4"	12—15"	2"
SPINACH	40 to 45 days	½—1"	24—30"	4—6"	12—18"	3—4"
SQUASH	S. 65 and W. 150 days	1—2"	6 to 8 ft.	4—8 ft.	8 ft. hills	4 to 6 ft.
TOMATO	150 days	¼—½"	6 ft.	6 ft.	4—6 ft. hills	3 to 6 ft.
TURNIP	60-75 days	¼—½"	22—30"	4—8"	10—18"	3—8"

There are three terms used there, which we define as follows:

"Early Spring," means as soon as buds in the trees begin to swell and the ground can be worked into gardening condition. This may be in March or April. Frosts have not passed, and such plants, if not too succulent, will stand a frost.

"Spring" refers to those vegetables which are not so hardy as the above, and which are usually planted later because they do so much better planted later. If for any reason early planting is necessary, they can be put in a week after the foregoing.

"Late Spring," is the time of the year when the ground is well warmed and all frosts are passed. This probably will be in May.

"Early Summer" means planting in June and July.

HOT-BEDS for forcing plants are best made in the following manner: Dig out a space the size of your frame to a depth of two feet. Into this put fresh horse manure mixed with a good deal of bedding straw to a depth of one foot or 18 inches. Tread this down well and on top spread 10 inches of good soil mixed with sand. The frame is just four sides of 1-inch board and made to slope toward the South from 18 inches at back, to 15 to 12 inches at front. The distance from front to back is three feet and the frame is as long as required. Put over this glazed sash, which can be hinged at back. This sash is raised during the day to prevent the bed over-heating and the plants from growing tall, spindly and weak. The sash must be white-washed or covered with a sack if the sun gets too hot. Sow the seed in rows from front to back and they will quickly start. Care must be taken to give ventilation each day or the plants will damp off, and when ready to plant out, lift the sash higher each succeeding day so as to harden the plants. Water most carefully. Set the frame in a sunny spot sheltered from the prevailing winds.

For our California conditions, that is but very slight cold, the bed does not need to be so hot. Mix the fresh horse manure with a good amount of chaff or dry leaves so that it will be less hot. Also sow the seed in little boxes, about 18 by 15 inches, in prepared soil. These boxes make the plants easy to handle and the boxes can be raised and a board put under them if the ground becomes too hot. There is also an advantage in using cloth instead of glass to cover the frame as this is less liable to let the plants overheat. A cold frame is the same as a hot-bed placed on the even ground, and in which no horse manure has been added to give heat. This is good to start early cabbage and the other early vegetable plants except Egg Plant, Pepper and Tomato.

WE ARE HEADQUARTERS IN CALIFORNIA for ALFALFA, CLOVERS and GRASS SEED

CLOVER SEEDS

Inoculate this Seed with FARMOGERM.

The prices of some varieties of Clover, Grass and Field seeds may change as the season advances. Prices now given are those prevailing when this catalog was published. It will be to advantage of intending purchasers to write for samples and special prices before ordering in large quantities.

ALSIKE OR SWEDISH CLOVER (Trifolium Hybridum)

A perennial variety, sometimes preferred to Red Clover, as it is generally finer and makes better hay for horses. The blossoms are also valuable for bees. Alsike succeeds on wet, cold and stiff soils. When used alone sow 8 to 10 lbs. per acre. **Lb. 35c; 100 lbs. $22.00.**

Bokhara, or Sweet Clover (Melilotus Alba). Grows three to five feet high, covered with small white flowers of great fragrance. Very valuable for bee pasture. Sow 10 lbs. to the acre. **Lb. 30c; 100 lbs. $25.00.**

Burr Clover (Medicago Denticulata). The native forage plant of California. Of the easiest culture, growing all winter and well into summer. We offer only **"Hulled seed,"** which is much easier to sow than in the burr. Sow from August to October, using 15 to 20 lbs. of hulled seed per acre. **Lb. 25c; 10 lbs. $1.80; 100 lbs. $10.50.**

Crimson, or Italian (Trifolium Incarnatum). An annual variety, growing 20 to 30 inches high, and having long, crimson blossoms. Excellent for both pasture and hay. Sow from 12 to 15 lbs. per acre, and cut for hay when in full bloom. **Lb. 30c; 100 lbs. $19.00.**

Japan Clover (Lespedeza Striata). Thrives in any soil and in the driest seasons; it makes fair hay and stock eat it readily when green. Sow in the spring, 15 lbs. per acre. **Lb. 40c; 10 lbs. $3.50.**

Mammoth Red, or Sapling (Trifolium pratense). Similar to Red Clover, but coarser, taller and more hardy. Sow from 12 to 15 lbs. per acre. **Lb. 35c; 100 lbs. $25.00.**

Melilotus Indica (Bitter Clover). An annual quick growing cover crop. Not good for forage or hay. Starts early to grow and is of good size when ready to plow under. Sow 20 to 25 lbs. per acre. **Lb. 20c; 100 lbs. $6.50.**

RED CLOVER (TRIFOLIUM PRATENSE).

Standard clover for all purposes. Yields the heaviest crop of any variety except alfalfa; makes superior hay, especially if mixed with Timothy. Sow from 12 to 15 lbs. per acre. **Lb. 35c; 10 lbs. $2.80; 100 lbs. $21.50.**

WHITE DUTCH (TRIFOLIUM REPENS).

Dwarf spreading vine-like variety, with white blossoms; used largely for bee pasture. It is also an excellent pasture plant for either sheep or cattle; also makes a beautiful lawn. Sow 10 lbs. per acre. **Lb. 75c; 10 lbs. $7.00.** If interested in cheaper grades of white clover, write us.

ALFALFA

Inoculate this Seed with FARMOGERM.

The land should be prepared by deep plowing and thorough harrowing, and should be well drained, for Alfalfa will not stand moisture too close to the surface.

It can be either drilled or broadcasted in, and from 15 lbs. to 25 lbs. per acre is required. It is best to sow in the fall, after the first rain, but can also be sown in the spring; but fall sowing is recommended whenever possible.

Our Alfalfa Seed is grown out of the State, on high land, and before putting it on sale we determine the purity by government test, although inspection before purchasing may show the seed to be free from dodder. There is no other weed that we are so fearful of, for generally they are either annuals or biennials, which are destroyed after a few cuttings. We handle several grades of Alfalfa Seed and are in a position to supply seed of most any value the customer may want, although it pays to plant only the best. Prospective customers can secure samples and have tests made free of charge at the Branch Seed Testing Laboratory, University of California, Berkeley, Cal.

Extra Choice Recleaned Alfalfa. The best acclimated sort, and recommended for all-round growing. We handled 22 carloads of alfalfa last year, and are always prepared to quote the lowest market prices for seed. **Lb. 30c; larger quantities at market price; write or wire.**

Grimm. This is the hardiest strain of Alfalfa there is. It has been developed to stand the cold winters even of Minnesota. Ours is the genuine stock. Grimm Alfalfa is drought resisting, winters perfectly, thrives on all soils except undrained meadow land and is unaffected by extreme hot, cold, wet or dry climate. Its feeding value is of the highest and the plant stools more than ordinary alfalfa, so that when sown broadcast 12 lbs. of seed per acre is sufficient. **Lb. $1.00; 10 lbs. $9.50; 100 lbs. $73.00.**

Peruvian Alfalfa, Smooth Strain. A very fine quick-growing alfalfa for irrigated sections. Produces hay in great abundance. Gets too woody in non-irrigated land. **Lb. 40c; 10 lbs. $3.75; 100 lbs. $30.00.**

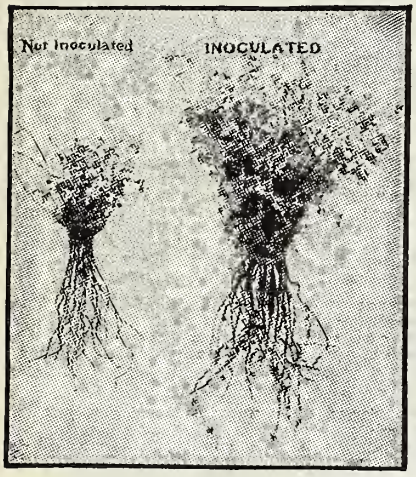
Hairy Peruvian. Makes fine hay of extra tender quality. One more cutting than ordinary sorts. **Lb. 50c; 100 lbs. $35.00.**

Turkestan or Dry-land Alfalfa. We make direct importations of this seed, and we can recommend it for situations where water is not abundant. We suggest that it be seeded a little heavier than the ordinary type, as it is inclined to become coarse and woody, and thick sowing will produce finer plants. We can supply this in original package, or in smaller quantities. **Lb. 35c; 10 lbs. $3.00; 100 lbs. $22.00. Write or wire us for present prices.**

Give Your Seeding of Alfalfa, Clover, Peas, Beans, Vetch and Other Leguminous Crops the Best Chance to Grow

At a small cost you can greatly add for your seedling plants conditions for vigor and for the robust growing of the crop, and at the same time add to your soil the fertilizer Nitrogen, in commercial quantities. Nitrogen is one of the most expensive of fertilizers and is also one of the hardest to keep in the soil. It is, moreover, one of the most necessary for plant growth. By inoculating your seed at the time of planting with **Farmogerm** you can add to the roots of your leguminous crop the bacteria necessary for fixing nitrogen from the air.

We do not ask you to believe what cannot be proved, what has not been tried by others and found successful by them. If it is good you should have the advantage of knowing about this new method of **"Fertilizing with Air."**



Alfalfa plants grown from seed sown at the same time

"It has been amply demonstrated, not only by hundreds of years of experience, but by numberless carefully conducted experiments in many countries and under widely varying conditions, that clover and numerous other legumes, supplied with tubercle (nodule) bacteria, obtain from the air, through the agency of these bacteria, under favorable conditions, all the nitrogen they require, and that they leave in the soil considerable quantities for succeeding crops. In Germany the amount of nitrogen added to the soil by legumes, besides that taken off in the crop, is estimated at 200 pounds per acre. In the United States the average for sixteen states is 122 pounds, equivalent to not less than 800 to 1,000 pounds of nitrate of soda per acre."—Year Book of Department of Agriculture for 1906.

"Bacteria can put from 150 to 200 pounds of available nitrogen in each acre where the legumes are properly used and this is worth from $25 to $30 per acre according to the market value of the nitrates."

—University of Southern California.

"In every case the crops following the incorporation of the legumes gave yields much in excess of those grown after a cereal crop had been turned under."

—University of California Circular 136.

Mr. W. T. Such purchased Alfalfa seed from us, inoculated the seed with Farmogerm and got a perfect stand while neighbors who sowed at the same time got nothing.

Ask for special literature.

Fertilize with Air!

Invigorate your young crop, strengthen your permanent crop, increase your yield, add fertilizer to your soil, by inoculating your seed at time of sowing with

TRADE FARMOGERM MARK

A pure culture of the most active nitrogen gathering bacteria. It comes in the form of a jelly, in which the bacteria live. Farmogerm has been tested and tried for years and its efficiency thoroughly proven.

FARMOGERM is guaranteed to retain its original vitality for two years, and is the **only** preparation of its kind **that is not sealed.** Other makes are dead or useless after six months.

ALL-CROP FARMOGERM

All cultures have been mixed together here so they will inoculate any legume crop. In addition, new bacteria have been found which will fix nitrogen in the soil independently. This means that these new bacteria will add nitrogen for any crop, whether leguminous or not. **All-Crop Farmogerm** is prepared dry instead of in jelly. It is the best dry culture there is.

One-acre Can (weight 1 lb.), **$1.00.**
Five-acre Can (weight 3 lbs.), **$4.00.**
Not postpaid.

Note.—All-Crop Farmogerm is not intended to replace the special cultures below. For any one crop those have the most bacteria and are the best.

Full directions for use on the bottle.

Farmogerm is prepared for these different crops as follows. When ordering, be sure to specify the crop for which wanted:

Alfalfa	**Melilotus (Yellow Trefoil)**	**Cow Peas**
Alsike Clover	**White Clover**	**Soy Beans**
Burr Clover	**Garden Peas**	**Garden Beans**
Red Clover	**Canada Field Peas**	**Vetch**
Sweet Clover		**Peanuts**
		Sweet Peas

Also for the following, which we will procure if ordered in advance. For

Crimson Clover	**Lima Beans**	**Lentils**
Japan Clover	**Horse Beans**	**Fenugreek**
Garbanza	**Beggar Weed**	**Serradella**
Velvet Beans	**Lupins**	

No. 5. Garden Peas, Garden Beans and Sweet Peas.

Farmogerm is put up in glass bottles in sizes as follows:

Garden Size (about ¼ acre), 50c; postpaid to Pacific Coast, **55c.**
1-acre Bottle, $1.50; postpaid to Pacific Coast, **$1.60.**
5-acre Bottle (cannot be mailed, but must go by express), **$5.00.**
50 acres—10 5-acre bottles in case (cannot be mailed, but must go by express), **$45.00.**
100 acres—20 5-acre bottles in case (cannot be mailed, but must go by express), **$87.50.**

Do not leave the seed in bright sunlight after inoculating. Write for directions.

"The successful farmer of tomorrow will be the one who knows how to handle most skillfully the micro-orgonisms in the soil."
—University of Southern California.

An eminent authority states, "I would as soon think of preparing an olfolfa field without seed as to sow the seed without inoculation," (See Farmers' Bulletin No. 257, U. S. Dept. of Agriculture.)

GRASSES

See our Special Free Delivery Offer on pages 1 and 2.

These prices fluctuate and are not guaranteed. Write for current prices.

AWNLESS BROME GRASS (Bromus Inermis). Will stand droughts and produce heavy crops in dry sections and on poor soils where other grasses perish. It is one of the hardiest grasses and succeeds on our dry hillsides. Sow 35 lbs. per acre. **Lb. 30c; 100 lbs. $19.00.**

Bermuda Grass (Cynodon Dactylon). is a dwarf perennial plant and spreads by means of its long and many-jointed root stalks, and for this reason is hard to eradicate once it has secured a foothold; thrives during the hottest part of the year, and will live under water for a long time. Makes a durable lawn and is also used to hold embankments. This grass is much used for lawns about Sacramento. The seed is very slow to germinate and requires heat and moisture. Sow 10 ibs. per acre. **Per lb. 50c; 10 lbs. $4.75.**

Creeping Bent Grass (Agrostis Stolonifera). Being of fine texture this grass is most valuable for lawns, and ideal for putting greens. It is of rapid growth and spreading habit, and makes a strong, enduring turf. Sow 40 lbs. per acre. **Lb. 85c; 100 lbs. $70.00.**

Crested Dog's Tail (Cynosurus Cristatus). Should enter in moderate quantity in permanent pasture and lawn mixtures. It does well in the shade, roots deeply, is stoloniferous and perennial. Valuable in mixture for lawns, putting greens and for pasture. If sown alone 30 lbs. should be used per acre. **Lb. 50c; 10 lbs. $4.50.**

Dallis Grass. See Paspalum Dilitatum, page 57.

Hard Fescue (Festuca Duriuscula). A dwarf-growing grass, forming a dense, rough mat, succeeding well in dry situations. Valuable as pasture on dry lands and sandy soils. Not recommended for lawns but valuable for fair greens. Sow 30 lbs. per acre. **Lb. 50c.**

Hungarian Grass or Hungarian Millet (Panicum Germanicum). Is a valuable quick growing annual forage plant. Seed is good for poultry. Cut for fodder just before blooming. Sow 30 lbs. per acre. **Lb. 15c; 100 lbs. $6.50.**

Italian Rye Grass (Lolium Italicum). Thrives in almost any soil and yields early and abundant crops. Sown in the fall, will produce an excellent hay crop the following season, but lasts only one year. Much sown in Humboldt County for pasture and hay. Not recommended for lawns. Sow 50 lbs. per acre. **Lb. 20c; 100 lbs. $13.00.**

KENTUCKY BLUE GRASS (Poa Pratensis). Fancy or double, extra clean. As this grass takes some time to become established it is preferably sown in mixtures for pasturage. Is truly perennial and prefers lime soils. As a lawn grass it is the finest there is—spreading habit, even texture, permanent, fine leaf and dark color. For pasture sow 50 ibs. per acre; for lawns, four or five lbs. per 1000 square feet. **Lb. 25c; 100 lbs. $20.00.**

Meadow Fescue, or English Blue Grass (Festuca Pratensis). A valuable grass for permanent pastures and for meadows for cutting which are rather damp. Makes a quick second growth, but does not do well on dry soils. Often sown in mixtures. Sow 30 lbs. per acre. **Lb. 35c; 100 lbs. $20.00.**

Meadow Foxtail (Alopecurus Pratensis). One of the best grasses for permanent pasture, early and of rapid growth. Is never sown alone but always in mixtures, using about four ibs. per acre. **Lb. 50c; 10 lbs. $4.50.**

Mesquite (Holcus lanatus). Valuable on the cleared redwood and pine lands of California and Oregon, giving large crops of hay and good pasture. Sow 35 lbs. per acre. **Lb. 30c.**

ORCHARD GRASS, or COCKSFOOT (Dactylis Glomerata). One of the most valuable of all pasture grasses; produces an immense quantity of forage, and hay of best quality. After being mown, comes up quickly and yields very heavily. Suitable for pasture under trees. Sown in the ashes on cleared redwood land in Humboldt County. Not suitable for lawns as it grows in tussocks. Sow 35 lbs. per acre. **Lb. 35c; 100 lbs. $25.50.**

Pearl Millet (Pencillaria). A perennial plant for fodder. Grows tall and yields an enormous amount of corn-like leaves. Sown in drills or broadcast, using three to five lbs. per acre if in drills, or 25 lbs. broadcast. **Lb. 35c; 10 lbs. $3.20.**

Perennial Rye Grass (Lolium Perenne). It grows rapidly and makes a good showing within month from time of sowing; grows very rapidly. The great pasture and meadow grass of Great Britain. Valuable for planting early on dry hillside, as it grows so very quickly. A good lawn grass but a little coarse. Sow 60 lbs. per acre. **Lb. 20c; 100 lbs. $11.00.**

AUSTRALIAN RYE GRASS. Especially selected and recleaned for lawns; does especially well on sandy soils. Sow five lbs. per 1000 square feet. **Lb. 20c; 10 lbs. $1.60; 100 lbs. $12.50.**

Red, or Creeping Fescue (Festuca Rubra). Forms a close, rich sod, and is valuable in lawns and should be in shade mixtures. Makes a close, lasting turf on dry, sandy soils, and can be used to bind dry banks. Also an excellent bottom grass for moist mixture. Sow 30 lbs. per acre. **Lb. 45c; 10 lbs. $4.25; 100 lbs. $35.00.**

RED TOP (Agrostis Vulgaris). Herd's Grass. Second only to Timothy as hay grass, and better if the ground is to be pastured afterward, for Red Top makes one of the best permanent pastures. Succeeds on all soils, though doing best on moist and even swampy land. A permanent grass and valuable as a lawn grass, giving quick effect. **Fancy, free from chaff.** Sow 15 ibs. per acre. **Lb. 35c; 10 lbs. $2.50; 100 lbs. $18.50.**

Rhode Island Bent Grass (Agrostis Canina). Like Red Top, this grass accommodates itself to all soils. Especially valuable for lawns on sand at the sea coast; from it the lawns at Newport are largely made. Is perennial, dwarf, and makes a beautiful, fine, close turf. For lawn sow 50 lbs. **Lb. 85c; 10 lbs. $8.00.**

Rough-Stalk Meadow Grass (Poa Trivialis). Excellent for pastures and meadows, particularly on damp soils. As a lawn grass it forms a fine turf and does well in shaded locations. Sow 20 lbs. per acre. **Lb. 75c; 10 lbs. $7.00.**

Sheep's Fescue (Festuca Ovina). Short and dense in growth, excellent for sheep pastures, because it will thrive on poor, gravelly, shallow or hilly soils where other grasses fail. Not recommended for lawns under ordinary conditions because it bunches. Sow 35 ibs. per acre. **Lb. 60c; 10 lbs. $5.50; 100 lbs. $48.00.**

SUDAN GRASS—No more important addition has been made to the hay crop of this State than Sudan Grass. It yields from 2 to 8 tons of hay per acre, depending upon whether irrigated or not. Two cuttings are assured and in places four have been taken. The hay is of superior quality and relished by all stock. Cut with a mower just after full bloom. Plant late in spring, after frost is past. If drilled in 36-inch rows, you will require 2 to 4 lbs. of seed; if seeded 18 to 20 inches, 4 to 6 lbs.; if broadcast, 15 ibs. If second grade is wanted, write us. We can meet prices. Ours is the best strain of this wonderful grass. **Lb. 40c; 10 lbs. $3.50; 100 lbs. $28.50.**

Sweet Vernal, True Perennial (Anthoxanthum Odoratum). Emits an agreeable odor, which it imparts to hay or to the lawn when being cut. Sow only in mixtures, using two or three lbs. per acre. **Lb. 80c.**

Tall Meadow Oat Grass (Avena Elatior). Of rapid luxuriant growth, recommended for soiling and in permanent hay mixtures, also for winter grazing. This variety is not a lawn grass. Sow 50 lbs. per acre. **Lb. 35c; 10 lbs. $3.00.**

TIMOTHY (Phleum Pratense). The grade we offer is particularly "choice," free from weed seeds and of high germinating power. Timothy is the great standard hay grass of the Eastern part of the country. It makes hay of the best quality, and produces a larger crop on good soil than any other grass. Not adapted for pasture as there is little growth after cutting, and tramping of stock soon destroys it. Not a lawn grass and not adapted to dry soils; height, two to three feet. Often sown with red top and red clover. Sow 15 to 20 lbs. **Price fluctuates. Lb. 20c; 10 lbs. $1.70; 100 lbs. $10.00.**

Various Leaved Fescue (Festuca Heterophylla). We regret we cannot supply.

Wood Meadow Grass (Poa Nemoralis). Cannot supply.

For above grasses and clovers which have prices that fluctuate, write for samples and market quotations.

Delivered free to the Fourth Zone. If you live beyond, add additional postage. See our Free Delivery Offer on pages 1 and 2.

The Hayward High School. The lawns are sown with Morse's Golden Gate Park Lawn Mixture.

GRASSES FOR LAWNS

(One pound of seed sows 200 to 250 square feet of lawn)

Good golf requires a good green, and "Morse's Putting Green Mixture" will be found splendid for this purpose, and is also good for a lawn where a close, hard turf is required. We have several lawn mixtures adapted to different soils—the finest is "Morse's California Lawn Mixture," and the most popular being the quick-growing "Golden Gate Park Lawn Mixture." The high merit of Morse's lawn grasses is recognized by many golf clubs and also by the Golden Gate Park. Your lawn, properly cared for, will be the equal of any if you sow the right grass.

Australian Rye Grass. The Australian Rye Grass makes a very hardy, bright green lawn, and, if treated with care, a very satisfactory one. It will grow and flourish on sandy soils, and we recommend this or preferably Pacific Rye Grass for lawns in San Francisco. **Per lb. 20c; per 10 lbs. $1.60; per 100 lbs. $12.50.**

Kentucky Blue Grass makes an excellent lawn of a dark-green color. It forms a fine mat, and with care and water is the best lawn grass for all soils except sandy ones. **Per lb. 25c; per 100 lbs. $20.00.**

"Morse's Golden Gate Park" Lawn Mixture contains the more hardy grasses which are used to make the sod for the park playgrounds where the grass has to endure much tramping over. The mixture also contains a very little white clover. **Per lb. 25c; per 100 lbs. $18.00.**

Morse's California Lawn Mixture. Our best general mixture for fine lawns; contains only the finest leaved grasses in the correct proportion to make a good, fine turf which will wear as no other can and will still look well summer and winter. **Per lb. 40c; per 100 lbs. $30.00.**

Morse's Putting Green Mixture. This makes a very springy, fine turf, which will mat and stand lots of hard wear. **Per lb. 60c.**

Morse's Special Shade Mixture. If you are troubled by a shaded spot in your lawn under some tree, where grass ordinarily will not grow, plant our "Special Shade Mixture" and you will soon have a lawn there as good as elsewhere. Our mixture is made from natural wood grasses, which grow in shaded places, and for such locations it is unequaled. **Per lb. 65c.**

IF YOU LIVE BEYOND THE FOURTH PARCEL POST ZONE REMEMBER TO ADD ADDITIONAL POSTAGE—EIGHTH ZONE ADDS 8c PER LB., SEVENTH ZONE 6c, SIXTH ZONE 4c, FIFTH ZONE 2c—ON ALL ORDERS FOR VEGETABLE, GRASS OR OTHER SEED.

GRASSES FOR LAWNS—Continued

Morse's Terrace Mixture. Just the mixture for those dry terrace slopes. Per lb. 50c.

Pacific Rye Grass (Morse's). The best grass for a straight lawn in any sandy soil, such as is about San Francisco. Pacific Rye Grass is like the hardy Australian Rye Grass, but is longer lived and of a much finer leaf, thus being easier to cut and looking better at all times. Per lb. 25c; per 10 lbs. $2.25; per 100 lbs. $20.00.

Morse's Velvet Lawn Mixture. A lawn grass for wet places. Per lb. 40c; 100 lbs. $30.00.

White Clover. This is the little dwarf growing clover used for lawns in many places, especially around Berkeley, with much success. The color is dark green, the leaves are small and close together, making a desirable lawn. The chief advantage, however, is that white clover roots deeply and so requires less care and water and still looks well. Per lb. 75c; per 10 lbs. $7.00.

LAWN MAKING

DIRECTIONS FOR MAKING A LAWN: Prepare the soil well; this means spade it over and dig in some fertilizer or manure. Let the ground stand a month, or else do not apply fertilizer until grass is three months old. Two weeks before planting roll and water the ground well and before sowing the seed hoe the soil but do not spade it. This will kill countless thousands of small weeds which are always in the soil and would otherwise have to be pulled up by hand—a laborious job.

Sow the seed evenly and roll it in or sprinkle a good cover of sandy loam over it. Where a roller is not available, rake the seed in lightly and press down by patting with spade. Water twice a day until grass comes up. In stiff, clayey soils, if planting in summer, use straw or leaves to protect the germinating seeds until the grass is an inch high. Make the lawn any time of the year if there is plenty of water. Use one pound of seed to 250 square feet of lawn. Keep free from weeds, water well, and cut regularly.

Fertilizer. To insure a rapid growth of grass some kind of fertilizer is necessary, especially in lawns where the nourishment of the soil has been used up by continuously growing on the same place. We have a fertilizer especially prepared to invigorate the growth of grass and to keep it that dark green color. Use one and one-half pounds to one hundred square feet, and make two applications each year. By express or freight only. **Odorless Lawn Dressing, 10 lbs. 60c; 25 lbs. $1.25; 50 lbs. $2.00; 100 lbs. $3.50.**

"Lawns and How to Make Them," is an excellent, well illustrated book, dealing with lawns and lawn grasses, and should be consulted where more information is required. Mailed for **$1.35.**

GRAINS

We have had so many inquiries for **SEED GRAINS** in past seasons that we have decided to list most of the regular market varieties of **BARLEY, OATS, WHEAT** and **RYE.**

Our prices will naturally be a little higher, as we send out nothing but recleaned seed. On account of the fluctuation in the market value of all **GRAINS,** it is impossible for us to quote a quantity price which would hold good throughout the season; consequently, we are not giving prices on amounts above 50 lbs. Write or wire us for prices where not given.

The price on quantities under 50 pounds is at one cent advance over the 50-lb. price.

BARLEY

COMMON. We have endeavored to get hold of seed stock that is clean and plump; **50 lbs. @ 3c per lb.; 100 lbs. at market rates.**

RYE

WINTER. Grown for hay by dairymen, but principally for grain; is also planted with Vetch, and in combination makes an excellent fodder; **50 lbs. @ 3½c per lb.; 100 lbs. at market rates.**

WHEAT

BLUE STEM. The most popular variety; used principally for hay, on account of being beardless; also used in mixture with Black Oats. **50 lbs. @ 5c per lb.; 100 lbs. at market rates.**

SONORA WHEAT. This is the variety used in the lower San Joaquin Valley and is very suitable for warm, dry climates; **50 lbs. @ 4½c per lb.; 100 lbs. at market rates.**

TURKEY RED. Used for blending in the manufacture of flour, on account of its hardness and high gluten content; it has also become very popular for poultry feeding. **50 lbs. @ 4c per lb; 100 lbs. at market rates.**

OATS

BLACK. Used principally along the Coast, where fogs prevail, where other sorts of oats would rust; **50 lbs. @ 5c per lb.; 100 lbs. at market rates.**

RED (Coast Red Oats). Are used principally in the interior to insure a change of seed; they are easily distinguished by their dark color from those grown away from the Coast; **50 lbs. @ 3½c per lb; 100 lbs. at market rates.**

RED (Inland Oats). Are also used extensively and produce the same quality of hay as the Coast Oats. There is probably more Red Oat Hay grown than of any other variety, and it is deservedly popular; **50 lbs. @ 3½c per lb.; 100 lbs. at market rates.**

SURPRISE OATS. This variety is used principally in the mountains in the interior part of the State, where it is very popular. When grown at lower levels it makes very coarse straw and for this reason is not desirable. **50 lbs. @ 3½c per lb.; 100 lbs. at market rates.**

MISCELLANEOUS FIELD SEEDS

Alfilaria (Erodium cioutarium). One of the most nutritious of fodder plants and well liked by cattle and horses. Alfilaria will thrive and make a good pasture on dry hillsides. May be found on Mt. Tamalpais as a pasture. Sow 20 lbs. per acre. **Per lb. 65c; 100 lbs. $55.00.**

Australian Salt Bush (Atriplex semi-bacata). A valuable forage plant for poor soils, especially those containing alkali. Sow seed in the fall to get the benefit of early rains, using one to two lbs. per acre. After the plant gets a good start it will grow with very little moisture. In cutting fodder be careful not to injure the crown of the plants. **Oz. 10c; lb. 60c; 100 lbs. $45.00.**

Buckwheat (Common). The best and most profitable variety. It is earlier than Silver Hulled and usually more productive. Is also excellent for bee pasture. Sow 25 lbs. per acre. **Lb. 15c; larger quantities on application.**

Canada Field Peas. A strong, vigorous pea often planted for green manure to plow under in the spring. Makes an excellent winter growth when sown in fall; very useful for fodder. Sow 60 to 75 lbs. per acre broadcast. **Lb. 15c; larger quantities on application.**

Cow Peas, Black Eye. This is the common Cow Pea extensively grown in the interior valley. It has a long root and stands heat well. Cow Peas are partly hardy to frost—more so than beans. The seed of this sort looks like a bean and is often called Black Eye Bean. Sow 60 lbs. per acre if drilled or 100 lbs. broadcast. **Lb. 15c; 10 lbs. $1.20; 100 lbs. $6.00. (Market varies.)**

Cow Peas, Whippoorwill or Speckled. Largely sown to make a rich, succulent growth to plow under to enrich the soil. This makes a good, long vine. Mixed with Soy beans, they make an excellent crop. Will grow in an acid soil. Sow 60 lbs. per acre. **Lb. 20c. Write for other prices.**

Emmer. A valuable grain from Russia. Grown in the United States for several years. It is adapted to a wide range of soil and climate, and is of superior feeding value, yielding much more heavily than oats and barley. This grain grows tall, like rye, and matures as early as barley, and yields from 40 to 80 bushels to the acre, and from four to six tons of straw hay. Tough and hardy, it stands the drought better than any other grain, making it a sure crop. Prepare your land as you would for wheat or oats, and sow at the rate of 75 or 100 lbs. per acre. Sow very early in the spring or fall, and do not let it stand until it gets too ripe before cutting as any grain that yields well, shells easily. In the green state it makes an excellent pasture. **Lb. 15c; 100 lbs. $5.50.**

Esparcette or Sanfoin (Onobrychis sativa). This is a perennial clover-like forage plant of the bean family. The word Sanfoin is the French word for sound or wholesome hay. Its habit of growth is more woody in the rootstalk than clover, and it grows to a greater average height. The stems are covered with fine hairs, the blossoms are numerous and of a pinkish color, and the roots are of a branching habit. Esparcette has a feeding value much the same as alfalfa and is cured for hay in the same way. Does not produce bloat in sheep or cattle. Esparcette is not suitable for wet or damp soils. Sow 30 lbs. of seed per acre broadcast. **Lb. 30c; 10 lbs. $2.50.**

Hemp (Kentucky Hemp). A staple crop for manufacturing, sown broadcast, using 25 lbs. of seed per acre. For a seed crop should be sown in hills four feet apart. Grows 12 to 14 feet high, with deep cut, dark-green leaves, which are rather fragrant. Makes a stately row along a walk, and is an interesting garden annual. The seed is used for birdseed. **Lb. 15c; 10 lbs. $1.00.**

Kale, Jersey or Cow. A tall-growing variety having a large bunch of cabbage-like leaves on top of a stout stem. Is much grown for chicken and cow feed. The green feed from these plants is very great, and is borne continuously. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.**

Millet German (Panicum Germanicum; Var.). Will grow on any good land and yields heavily when artificially watered; yields from 40 to 60 bushels of seed per acre, which is excellent food for stock or poultry. A good, green fodder plant. Sow 30 lbs. per acre. **Lb. 15c; 100 lbs. $5.50.**

Niles Peas. Used principally for green manure. Is a strong, vigorous grower, making long vines and good roots. Sow broadcast, using 60 to 75 lbs. of seed per acre. **Lb. 15c; larger quantities on application.**

Paspalum Dilitatum, or Dallis Grass. A new grass for hot, dry climates. A hardy perennial from Australia, growing five feet high, without getting tough, and seems to be particularly adapted for grazing dairy cattle. It stands drought remarkably well, and shoots rapidly again with the first shower of rain, and is a splendid winter grass. The seed requires about three weeks of moist, genial weather to germinate it, but once established, it seems to stand anything. Sow 8 or 10 lbs. per acre. **Oz. 10c; lb. 55c.**

Rape (Dwarf Essex). A biennial crop, used principally for sheep pasture, of which it yields an abundance of the best quality. Is usually sown broadcast on ranges using four to five lbs. per acre. **Lb. 25c; 100 lbs. $15.00.**

Soja Bean. Valuable as a forage crop or green manure. Also as a green fodder and silo plant. Sow 30 pounds per acre after danger from frost is passed. **Lb. 20c; 100 lbs. $8.50.**

Sunflower (Large Russian). A variety bearing large heads, frequently 12 to 20 inches in diameter and sometimes yielding 1000 pounds of seed per acre. The seed is used for feeding chickens and parrots. Sow in the open field as soon as danger from frost is over, using three lbs. of seed per acre, sowing in rows five feet apart and thinning to one foot. **Lb. 15c; 100 lbs. $5.00.**

Teosinte (Reana Luxurians). This plant grows quickly and produces a large quantity of forage in warm locations. The seed should not be sown until all danger of frost is past. If cut for green forage, which can be done at any stage during growth, two or more joints should be left at the base of the stalk. These will sprout out quickly into fresh growth, making an even larger crop than at first cutting. Sow in drills four feet apart, using four lbs. of seed to an acre. **Oz. 10c; lb. 60c.**

Velvet Bean. Used largely as a green-manure plant and also for forage. Grows taller and larger than any other soil plant, being sometimes 30 feet in length. Sow same as Cow Peas, in rows five feet apart and in hills four feet apart in the row. **Lb. 20c; 10 lbs. $1.50.**

Vetches, Spring, or Tares (Vicia Sativa), also called Common Vetch, Oregon Vetch, and Oregon Winter. A plant resembling pea vines and valuable for forage or green manure. It is usually sown with oats or wheat to hold them up. Sow 60 lbs. per acre with grain, or 80 to 100 lbs. if sown alone. Is hardy and makes a fine winter growth. Largely planted in the orange groves of the South for green manure and plowed under in the spring. **Lb. 15c; 100 lbs. $5.50; larger quantities on application.**

Owing to frequent fluctuations on Clover and Field Seeds, we will not list the 100-lb. price, but request that all who are interested in quantities will write us for samples and quotations. We carry all Field Seeds in immense quantities and are able to quote low prices.

PASTURE MIXTURES OF GRASSES

We have two mixtures of grasses which are excellent for pasture highly priced. No effort or expense has been spared to get th best. They contain all of the best grasses for feeding, including those These will outlast and outyield any single grass. We recommend the addition of 2 lbs. of Red Clover, and 1 lb. of Burr Clover to 50 lbs. of Morse's Dry Pasture Mixture, and of 2 lbs. of Alsyke Clover, to the Wet Pasture Mixture. If wanted for hay add to each 50 lbs., 5 lbs. of Timothy. Sow 40 lbs. per acre.

MORSE'S DRY PASTURE MIXTURE, per lb. 30c; per 100 lbs. $21.00.

MORSE'S WET PASTURE MIXTURE, per lb. 30c; per 100 lbs. $19.00.

Grasses and clovers and field seeds have prices that fluctuate, so write for samples and market quotations.

Ask to have our Fall Catalogue of Hyacinth, Tulip, Daffodil bulbs, etc., sent to you in October. Plant early.

Dwarf White Milo Kaffir Corn Early Amber Sorghum White Egyptian Corn Feterita

NON-SACCHARINE SORGHUMS—For Forage and Grain

Dwarf White Milo or Milo Maize, and Feterita

For several years we have seen the necessity for selected, acclimated seed for field crops. We have been fortunate during this past season in having had grown for us two crops which we consider of prime importance to the farmers of the State, especially for use in the non-irrigated sections. On the other hand, in each instance, irrigation would be excellent and improve growing conditions. In offering DWARF WHITE MILO and FETERITA, we feel that we are putting on the market something that is of real benefit to the farming communities that require "catch crops." Both of these grains have been grown in other sections very satisfactorily. We have chosen them as being the best suited to conditions in our two great valleys. The following simple cultural directions should suffice for most localities:

Deep plowing, thorough harrowing so as to secure the best possible seed bed; four lbs. of Black Hulled White Milo should be ample per acre; three to four lbs. of Feterita; planting should not be done until the ground has warmed up, which would generally be about the last of April. If a corn planter is used, the seed should be dropped about 18 inches apart in the row, the rows being 40 to 44 inches apart. Under ordinary conditions the crop should mature in 90 to 100 days from the time of planting. If sufficient water is available for two irrigations, we believe that two complete crops of both seed and fodder could be obtained under normal conditions. In our own crop growing this season the Feterita started to head out 40 days after the time of planting. We have a good supply of hand-selected seed, grown particularly for seed purposes, carefully recleaned and graded, which we are offering as follows:

DWARF WHITE MILO, lb. 15c; 100 lbs. $4.50.

Broom Corn (Improved Dwarf Evergreen). Used for making brooms, and extensively used on account of its green color and fine long straight brush. It grows about seven feet high. Sow 10 lbs. per acre. **Per lb. 15c; 100 lbs. $3.00.**

Egyptian or Jerusalem Corn. Belongs to non-saccharine sorghums. It is considered a good grain for dry sections and seasons. It produces several small heads on side shoots, often as many as eight heads on a stalk. The seed makes excellent chicken food. Plant eight lbs. per acre. **Lb. 15c; 100 lbs. $3.00.**

FETERITA, lb. 15c; 100 lbs. $5.00.

Kaffir Corn, White. Grows from 6 to 10 feet high and thrives in hot, dry climates. Makes good fodder for cattle and the seed is used for stock and chicken food. Sown in rows three feet apart, using three to five lbs. per acre. **Lb. 15c; 100 lbs. $6.50.**

Shallu or Egyptian Wheat. A tall-growing sorghum which has many stalks from one root. Sow in rows for grain, using 3 to 5 lbs. per acre, or broadcast, using 30 lbs. for fodder. **Lb. 15c; 100 lbs. $5.00.**

Sugar Cane Sorghum, Early Amber. A good fodder if cut when two feet high. Is nutritious and yields a heavy crop. Sow late in April, using five lbs. of seed per acre in drills, or 25 lbs. broadcast. **Lb. 15c; 100 lbs. $5.50.**

COVER CROP AND GREEN MANURE CROPS

Inoculate this Seed with FARMOGERM.

There is no way so good to improve soils as to grow a cover crop of some leguminous plant and then to plow it under when just coming into flower, or at the time of the last spring rains. This growing of cover crops is being done very largely in the orange orchards in the South and each year more of the Northern progressive orchardists are planting Melilotus and Burr Clover in the Fall and plowing it under in April or before.

For orchard work the best time to plant cover crops is in the Fall; the best way to get a fine, healthy growth of plants is by inoculating the seed at the time of sowing with Farmogerm. The highest returns, in nitrogen added, come from crops inoculated. Nitrogen is fertilizer when added as above, improving your soil and adding dollars to your crop. This is no experiment; it has been attested a hundred times.

We give below the best winter growing cover crops for California, desirable in the order named. Be advanced and scientific and add fertility to your soil in the cheapest way by growing each year some of these crops. Prices fluctuate; 100 lb. and ton prices gladly quoted on application.

MELILOTUS INDICA (Bitter Clover). The crown of the plant has many stalks leading out from it. Sow shallow. Flowers yellow. See page 52. **Per lb. 20c; 100 lbs. $6.50.**

BURR CLOVER (Medicago Denticulata). Burr clover is among the best cover crops and in some localities is accounted the very best. Requires very little water. Sow with the first rains, using 15 to 20 lbs. of seed per acre. **Per lb. 25c; 10 lbs. $1.80; 100 lbs. $10.50.**

SPRING VETCH (Vicia Sativa). Carloads of this are planted for a cover crop each year. Vetch does not grow luxuriantly until the coldest weather has passed. Greatly needs inoculating. **Per lb. 15c; 100 lbs. $5.50.**

CANADA FIELD PEAS. Excellent for cover crop or for forage for cattle. Makes a good growth even if planted late. Sow 70 to 80 lbs. per acre. Inoculated soils are essential. **Per lb. 15c; larger quantities on application.**

SWEET CLOVER or BOKHARA (Melilotus Alba). Grows well on the poorest soil and improves all soils. Does not get started so quickly as the Melilotus Indica, but is probably better for a summer growth. Sow 10 lbs. per acre. **Per lb. 30c; 100 lbs. $25.00.**

For summer growing cover crops we recommend:

SOY BEANS or SOJA BEANS and COW PEAS (Black Eye and Whippoorwill). See page 57.

CALIFORNIA TREE AND SHRUB SEEDS

The vitality of tree and shrub seeds cannot be tested before the sale, but only such seeds are sent out as we believe will give complete satisfaction. No guarantee of genuineness or germination can be given, and we presume that parties ordering have read the above and agree to the conditions.

Price per packet, 10 cents, except where noted.

Abies Douglasii (Douglas Spruce). A very large and important timber tree, 200 to 300 feet high; of pyramid shape. Found throughout the Rocky Mountains, from Oregon to Mexico. Very hardy. **Oz. 40c; lb. $4.00.**

California Fan Palm (Washingtonia Filifera). Our well-known hardy fan palm with threads on the leaves. The leaves hang on after they have dried. **Oz. 15c; lb. $1.50.**

Christmas Berry (Photinia Arbutifolia). A California Evergreen shrub, 10 feet high, bearing clusters of bright red berries. These are gathered for decorations at Christmas time and are familiar to nearly everyone. **Oz. 20c; lb. $1.50.**

Cupressus Arizonica (Blue Cypress). A handsome tree with horizontal branches and open head. Forty feet high and very blue in color. **Oz. 40c; lb. $4.00.**

" **Goveniana (Goven's Cypress).** 30 to 40 feet high; very ornamental; found in the Coast Ranges of Monterey. **Oz. 40c; lb. $4.00.**

" **Lawsoniana (Lawson's Cypress).** A handsome tree with white fragrant wood, free from knots; easily worked and very durable. **Oz. 40c; lb. $4.00.**

" **Macrocarpa (Monterey Cypress).** A tree 40 to 60 feet high, rough bark; spreading, horizontal branches, rich green foliage; very ornamental for lawns or parks; also used extensively for hedges. **Oz. 20c; lb. $2.00.**

" **Pyramidalis (Italian Cypress).** This variety is of upright pyramidal growth, and is much used in cemeteries. **Oz. 40c; lb. $4.00.**

Grevillea Robusta (Silk Oak of East Australia). Beautiful fern-like foliage; of rapid growth, flowering when about 20 feet in height; covered with bright orange-scarlet flowers. **Pkt. 15c; oz. 60c.**

Libocedrus Decurrens (Thuya Craigiana). A fine hardy timber tree, known as White Cedar of California. **Oz. 40c; lb. $4.00.**

Madrone. A beautiful native tree of California. The foliage is a deep green and leathery; it attains a considerable size; flowers white; difficult to grow. **Pkt. 15c.**

Manzanita. A low-growing tree or shrub, bearing attractive white blossoms and beautiful red berries. **Pkt. 15c.**

Picea Grandis (Western Balsam Fir). Grows 200 to 300 feet high, 4 to 6 feet in diameter; grows rapidly in rich, moist soil; valuable timber tree. **Oz. 40c; lb. $4.00.**

Picea Magnifica. The **Red Fir** of the Sierras, found at an altitude of 7000 feet; very hardy. **Oz. 50c; lb. $5.00.**

Date Palm (Phoenix Canariensis). A beautiful long-leaved variety, growing to an immense height. **100 seeds for 25c; 1000 seeds for $1.50; per lb. $1.00.**

Dracaena Indivisa (Dragon Palm). A handsome palm-like tree used for planting along avenues. The leaves are borne in a head at the top of a branchless stem, eight to fifteen feet high. **Oz. 30c; lb. $3.00.**

Pepper Tree (Schinus Molle). Well known handsome shade trees, with feathery leaves and red berries. **Oz. 15c; lb. $1.50.**

Pinus Insignis (Monterey Pine). A very ornamental tree for parks and lawns; grows from 60 to 70 feet high; of rapid growth; has beautiful green foliage. **Oz. 25c; lb. $2.50.**

" **Jeffreyi.** A magnificent tree, usually found at an elevation of 5000 feet; very hardy. **Oz. 35c; lb. $3.50.**

" **Lambertiana (Sugar Pine).** A hardy tree of gigantic dimensions, found on both slopes of the Sierras. The finest pine timber tree. **Oz. 30c; lb. $3.00.**

" **Ponderosa (Yellow Pine).** One of the largest pine trees known. Found in Coast Range on the highest points. Very hardy. The most valuable timber variety. **Oz. 30c; lb. $3.00.**

" **Sabiniana (Nut Pine).** Abundant over the dry and hot hills of the Coast Range. Very hardy. **Oz. 20c; lb. $2.**

Sequoia Gigantea (Wellingtonia Gigantea). The mammoth tree of California. This is the largest tree known to exist on the American continent. **Pkt. 25c; oz. 60c; lb. $6.00.**

" **Sempervirens.** Usually known as **California Redwood.** The most valuable timber of the California forests. **Oz. 40c; lb. $4.00.**

ACACIA AND EUCALYPTUS TREE SEEDS

EUCALYPTUS IS THE GREAT COMING SOURCE OF TIMBER FOR THE PACIFIC COAST

Price per Packet, 15 cents, except where noted.

ACACIA Baileyana. A handsome tree, with glaucous foliage; in great demand for street planting. One of the most beautiful of the Acacias. **Oz. 40c; lb. $4.00.**

" **Decurrens (The Black Wattle of Australia).** In California it has grown over 50 feet in eight years. **Oz. 40c; lb. $4.00.**

" **Latifolia.** While making an ornamental tree if allowed to grow, it nevertheless is extensively used and makes fine hedges. **Oz. 40c; lb. $4.00.**

" **Lopantha.** One of the rankest growing sorts, makes a bush 15 to 20 feet high with spreading leaves. Largely used in Golden Gate Park. **Oz. 20c; lb. $2.00.**

" **Melanoxylon.** In irrigated glens of deep soil this tree will attain the height of 80 feet, with a stem several feet in diameter. **Oz. 35c; lb. $3.50.**

" **Mollissima.** A fine, erect, rapid-growing tree, with glaucous green, feathery foliage; flowers yellow and borne in racemes. **Oz. 40c; lb. $4.00.**

EUCALYPTUS Amygdalina (Giant Gum Tree). Is one of the best for subduing malarial effluvia in fever regions, although it does not grow with quite the same ease as the Eucalyptus globulus. **Pkt. 15c; oz. 75c; lb. $7.50.**

" **Citriodora.** The well-known lemon-scented gum; a popular favorite. **Pkt. 35c; oz. $2.00.**

" **Corynocalyx (Sugar Gum).** This variety will stand more frost (22°) than any other Eucalyptus, and will also stand more drought. Quick growing timber variety. **Oz. 90c; lb. $9.00.**

" **Ficifolia Scarlet.** Very ornamental for lawn or avenue planting; has beautiful crimson flowers. **25c per packet of 25 seeds.**

" **Globulus (Blue Gum).** A very rapid-growing tree, making valuable timber. The common variety—the one most generally planted. **Oz. 40c; lb. $4.00.**

EUCALYPTUS Leucoxylon Pink (Ironbark Tree). The culture of this variety is desirable on poor, stony land, where other Eucalypti would be unsatisfactory; flowers are a beautiful cerise pink. **Pkt. 15c; oz. $1.00.**

" **Marginata (Jarrah of Western Australia).** A very excellent timber. Resists teredo, on which account it is largely used for piles. **Oz. 75c.**

" **Robusta (Swamp Mahogany).** Thrives best on low grounds, especially near the sea coast; makes a good tree for street planting. **Oz. 50c; lb. $5.00.**

" **Rostrata (Red Gum).** A rapid-growing tree; stands heat and considerable cold without injury. **Imported, oz. 75c; lb. $7.50; domestic, oz. 40c; lb. $4.00.**

" **Stuartiana (Apple-Scented Gum Tree).** Seems to do equally well on rather dry and sandy as on humid soils. The wood is of a handsome dark color and takes a good polish. **Pkt. 15c; oz. $1.00.**

" **Tereticornis (Gray Gum).** A very hardy, quick-growing Eucalyptus; largely used for railroad ties, etc. One of the sorts most often planted for timber; makes a hardwood which is reddish in color and can be stained and used as a substitute for mahogany. There is a great future for this tree in California. **Oz. 40c; lb. $4.50.**

" **Viminalis.** In poor soil it grows to a moderate height; in rich soil it attains gigantic size. **Oz. 50c; lb. $5.00.**

We import seed of the following desirable varieties of Eucalypti, and offer at the uniform price of **15c per packet, 80c per ounce.**

E. Cambagei. **E. Coriacea.** **E. Crebra.** **E. Gonicalyx.** **E. Gunnii.** **E. Hemiphloia.** **E. Maculata.** **E. Melliodora.** **E. Obliqua.** **E. Platyphilla.** **E. Saligna.** **E. Polyanthema.** **E. Resinifera.** **E. Rudis.** A fine street tree. **E. Piperita.** **E. Siderophloia.**

See under the head of Eucalypti—in our Nursery Department—for varieties we can furnish in plants

GLADIOLUS

Here are fine, new Gladioli, varieties with tall straight stems and flowers facing one way. Gladioli make handsome garden flowers with their tall spikes, which are in bloom for months, and they are most satisfactory as cut flowers, for the buds open in water in the house. Do not fail to plant our grand novelty this year—"Panama"—nor some of our other fine new sorts.

The culture of the Gladiolus is of the easiest. Set the bulbs about three inches deep and seven or eight inches apart each way. Any good garden soil will make strong plants and good bloom, but for the finest results use manure and plenty of water. After the flowers are past, dig the bulbs up and dry them under cover in the open air for a month and then store in dry soil till next winter, when they may be reset. From January to April are the months in which to plant Gladioli, but for a succession of flowers they may be started to the middle of June.

It may be that the comparative high prices of these fine new sorts have kept them from being offered here before, but we believe that when the planter realizes that they are worth the price, and comes to know what grand flowers they are, our stock will soon go, with the result that many gardens will be made beautiful.

Gladioli do well in San Francisco, standing against the cold summer winds, and blossoming most freely for weeks.

(If wanted by mail add postage at parcels post rates. Weight of 1 doz. 1¼ lbs.)

GIANT CHILDSII, GANDAVENSIS AND HYBRID GLADIOLI

These selected sorts are very tall and erect, often four or five feet high, with spikes of bloom over two feet long. The flowers are of great substance and of gigantic size, frequently seven to nine inches across, and with a great variety of colors.

Gladiolus Pink Beauty

America. A very popular sort and most deservedly so. The flowers are a soft lavender pink, or a light flesh pink, with a lavender tint; the blossoms all face one way and are very large. **Each 5c; doz. 35c; per 100 $2.50.**

Augusta. Lovely pure white, with blue anthers. **Each 5c; doz. 50c; 100 $3.50.**

Baron Joseph Hulot (Blue King). Without a doubt the finest blue Gladiolus. It is a rich deep color, of an indigo shade; much superior to Blue Jay. If you have never seen a good blue Gladiolus, try this one. **Each 10c; doz. $1.00.**

Brenchylensis. A fine old vermilion scarlet variety, stems only medium heavy. **Each 5c; doz. 50c.**

Europe. A very fine new pure white. **Each 30c; doz. $3.00.**

Faust. Deep purplish carmine, with white markings on lower petals. **Each 5c; doz. 50c.**

Glory. Creamy white, shaded pink, crimson stripe on each petal. **Each 10c; doz. $1.00.**

Golden King. Rich golden yellow with crimson blotch. **Each 20c; doz. $2.00.**

Hohenzollern. Beautiful orange flushed chamois. **Each 10c; doz. $1.00.**

Jean Dieulafoy. Primrose with red center and blood red blotch on 3 lower petals. The flowers are a good size, 3½ to 4½ inches across. The general effect is light yellow with a ruby center. **Each 10c; doz. $1.00.**

Lady Howard de Walden. Clear yellow with a large crimson blotch. **Each 20c; doz. $2.00.**

La Fayette. Very large; yellowish salmon with a crimson blotch. **Each 15c; doz. $1.50.**

Liebesfeuer (Love's Fire). A most striking new Gladiolus of a bright coral shade. The flowers and spike are fine and this variety is the best scarlet. Try this fine novelty. **Each 30c; doz. $3.00.**

Mrs. Francis King. A lovely light scarlet or flame color. The flowers are unusually well arranged. A variety much used for commercial planting on account of its pleasing tone of color and fine large size. **Each 5c; doz. 50c.**

Mrs. Frank Pendleton. Bright rose pink, shading to a deeper pink at center of petals; very large flowers. **Each 25c; doz. $2.50.**

Niagara. Extra fine light yellow; large flowers and strong stems. **Each 12c; doz. $1.25.**

Panama. A beautiful deep pink, with large, well-expanded flowers and a tall spike. Panama is a deep pink, companion to America, now the most popular pink. Panama is deeper and is a grand acquisition to every collection of Gladiolus. We are offering this for the first time, and at reasonable rates. **Each 10c; doz. $1.00; per 100 $6.00.**

Peace. Large flower; white with large pale Catteleya-like feathering on the petals; flowers well placed on the stem. **Each 20c; doz. $2.00.**

Pink Beauty. Bright carmine rose, with darker blotch on lower petals; early; fine cut flower. **Each 5c; doz. 50c.**

Princepine. Bright red with pure white blotches on the lower petals. **Each 10c; doz. 75o.**

Princeps. A large wide, wide open, very handsome flower, like an amaryllis. A rich crimson with broad white blotches across the lower petal. **Each 7c; doz. 75c.**

Salmon Queen. Fine salmon pink. **Each 10c; doz. 75c.**

White Excelsior. White with a little carmine showing through if grown in the sun; fine, strong sort. **Each 10c; doz. 75c.**

Collection of one each of the above kinds, 23 bulbs for $2.65.

(Estimated parcels post weight, 2½ lbs.)

MIXED GLADIOLI

These have the various types and colors separated, and while not so fine as our named sorts offered above still they have a great variety from seedlings.

Extra White and Very Light Shades Mixed. Doz. 75c; per 100, $5.00.

Pink and Rose Shades Mixed. Doz. 50c; per 100 $4.00.

Brilliant Scarlet and Red Shades Mixed. Doz. 50c; per 100 $3.50.

Orange and Yellow Shades Mixed. Doz. $1.00; per 100, $6.50.

Childsii Type Mixed. Large flowers, soft and wavy on the edges; all colors. **Doz. 60c; per 100, $4.00.**

Groffs Hybrids Mixed. A fine mixture. **Doz. 60c; per 100 $4.00.**

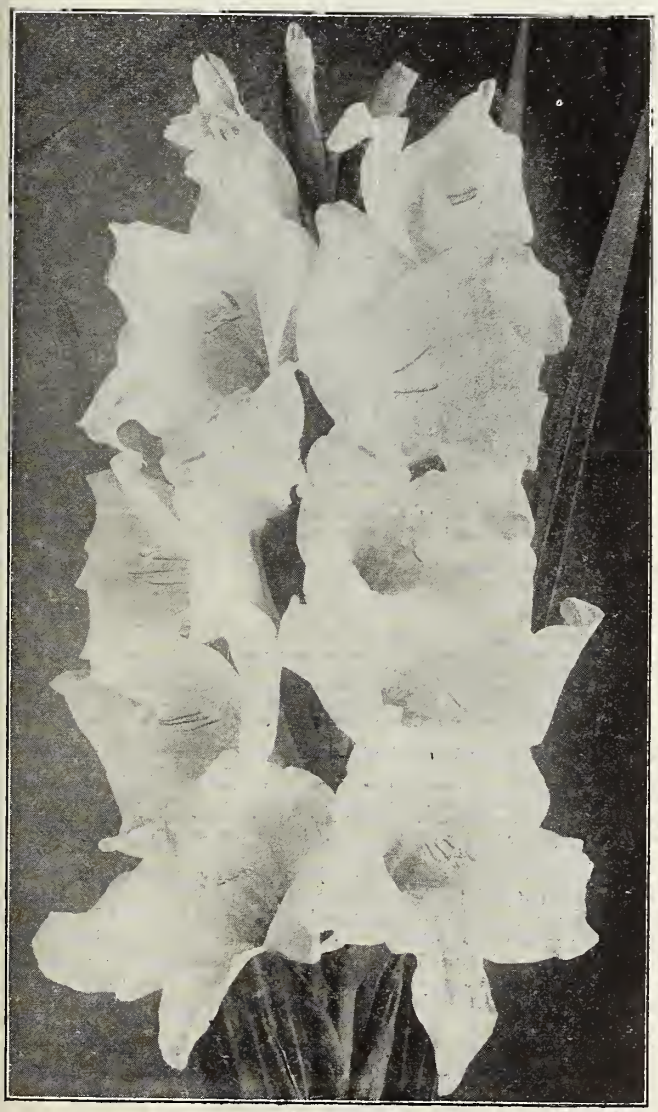
All Kinds Mixed, including many fine sorts. **Doz. 75c; 100 $5.00.**

BEGONIAS (Tuberous-Rooted)

For January and February delivery. Splendid pot plants and equally useful for bedding purposes; very free flowering, doing best with partial shade. (Prices include postage.)

We offer Begonias in the following **separate colors: Dark rose, light pink, salmon, scarlet, white and yellow. Double:** all colors, separate or mixed. **10c each; $1.00 per doz.**

Single: all colors, **separate or mixed. 5c each; 75c per doz.**



America Gladiolus
Panama is like this, only deeper pink

LILIES

Plant six inches deep in a well-drained soil, preferably in a cool spot. For other varieties consult our **Fall Catalogue of Bulbs,** issued in October.

The bulbs are ready for delivery in December, January and February, but not later. If wanted by mail, add parcel post charges, figuring weight at three pounds per dozen.

AURATUM. The grandest of all hardy Lilies, with large, graceful flowers of a delicate ivory-white color, thickly studded with chocolate crimson spots, and a bright golden band through the center of each petal. The largest Lily there is, 10 inches across, and very fragrant. **Each 15c and 20c; doz. $1.25-$2.00, according to size of bulb. Per 100, $8.00 and $12.00.**

Easter Lily, or Longiflorum. While if planted as late as January these will not be in bloom for Easter Day, still they will bloom in the middle of summer out of doors, and are most attractive in a garden. Watch for plant lice on the unexpanded buds, and treat with tobacco solution or tobacco dust (consult our list of insecticides at end of book). **15c and 20c each; $1.50 and $2.00 per dozen, according to size.**

Speciosum Album. Beautiful pure white flowers of large size; petals recurve. Very easily grown and very handsome. **20c each; $1.75 per dozen.**

Speciosum Rubrum Magnificum. This variety is much more crimson in color than the ordinary Rubrum, and is heavily spotted. **15c each; $1.25 per doz.; $8.00 per 100.**

Speciosum Rubrum. This is the tall, light red Lily, often seen in florists' windows. It is perfectly hardy in the open garden and is a strong and vigorous grower. Plant in well-drained soil in a partially shaded place. The Lily blooms in July and August, having a spike three to four feet tall, with bright lilies of a light crimson and white color; the petals recurve. **10c each; $1.00 per doz.; $7.00 per 100.**

Tigrinum (Tiger Lily). Fine showy blossoms, brilliant orange-red, spotted with black; three to five feet high, and blooms in August. The Tiger Lily is one of the best for out of doors, for it is perfectly hardy and will last for years in the garden, each year sending up its black and orange flower spike. **15c each; $1.25 per doz.**

TUBEROSES

For early flowers they can be started in February or March in the greenhouses or hot-bed, and for a succession they can be planted at intervals as late as August. For flowering in the open border plant about the middle of May. (Postage additional for 1½-lb. weight per doz.)

Excelsior Double Pearl. Extra large bulbs. **3 for 15c; doz. 40c; 100 $3.00.**

THE YELLOW CALLA LILY
(CALLA ELLIOTTIANA)

Is the only true yellow flowered calla in existence and on account of its marvelous beauty has created a sensation wherever exhibited. It is a summer flowering variety, with the same habit of growth as the well-known common White Calla, with flowers of the same size and shape, but of a clear, rich, golden-yellow. The foliage is dark green, with a number of white spots, which greatly add to the beauty of the plant—so much so that when not in flower the plant at once arrests the attention and is ever an object of enthusiastic admiration. (Postage additional, weight 1½ lb. per dozen). **Crop short. 35c each; $3.50 per doz. Small size 25c each; $2.50 per doz.**

BULBS

Besides the above we have usually in stock during December and January bulbs of **Caladiums ($1.50 doz.); Scarlet Freesias (25c doz.); Gloxinias (no importations this year); Montbretia (40c per doz.);** and **Spireas (25c, 35c and 50c each).** See Bulb Catalogue for postage rates.

OUR FALL CATALOGUE OF BULBS, issued each October, fully describes and lists these and many other bulbs. Ask to have this catalogue sent to you in the **Fall.**

FLOWER SEEDS

There are no more satisfactory flowers than those grown from seed, especially the easily grown and brilliant flowered annuals. The beautiful shrubs and lilies, of course, have their place, but are far more expensive than a paper of seed which will furnish a large number of plants with usually enough for one's garden and some to spare.

Aim to have your garden one artistic unit, with some flowers in bloom at all seasons, with colors which harmonize, and with plants in size grading from the dwarf borders, to the bedding annuals, and then to the taller plants which usually should stand next to the house or other confines of the garden or lawn. A garden carefully thought out and planned gives very much more pleasure than a haphazard one.

A perfect garden could not be made from seed alone; the grounds must have some shrubbery for its permanent character. We are connected with The Vallance Nursery of Oakland, Cal., who will supply every need for private grounds of all dimensions; see our list of trees and shrubs in the succeeding pages of this guide. On the other hand, no garden would be pretty or satisfactory which did not have a good number of flowers from our flower seed list most carefully chosen and placed in the garden.

There is doubt with many as to the best time to plant the different flower seed. There is a new book by Prof. E. J. Wickson entitled California Flower Gardens, which is very fine; Price $1.50, or postpaid $1.60. This is written especially for California. One Eastern book will be found very useful, with its explicit directions, namely, "The Practical Garden Book," by Prof. L. H. Bailey, which we will mail postpaid for $1.10.

WHEN TO PLANT FLOWER SEED

In describing many of the different flowers we have used the terms "annual," "hardy annual," "tender annual," "perennial," "tender perennial," etc. These may have seemed to you tiresome descriptions, but properly understood they tell much about planting. The dates in the following brackets will vary with the time that heavy frosts come in different places. While they show the best months for San Francisco, planting may be extended much later in all cases.

TENDER, or Greenhouse, means the plant will not stand the least frost. All such must be planted late in spring (May) or in a greenhouse.

HALF HARDY means the plant will stand any light frost, but needs protection against very cold weather. These should be planted in the spring (March and April), not in the fall.

HARDY means the plant will stand considerable frost, or practically all we have on the Pacific Coast. These may be planted in the fall or in the spring (October to May). If sown in the fall they will come into bloom earlier than if sown in the spring, even if the plants do not make much progress during the cold weather.

ANNUALS are plants that bloom the first year from seed, and the plant dies after one season. Tender annuals must be sown in spring (April to June) and hardy annuals may be sown in either spring or fall (October to May).

BIENNIALS are plants that bloom the second year from seed, and the plant dies after the second year. In California many of these will bloom the first year if sown early. Sow under same conditions as perennials.

PERENNIALS are plants that bloom the second year from seed, and the plant lives and blooms during successive years. If sown in early spring (February to April 15) many perennials will bloom the first year from seed. Tender and half-hardy perennials are best sown in spring after frost is over (April 15 to June). Hardy perennials are best sown in the late summer and early fall (July to October) for next year's flowers.

HOW TO SOW FLOWER SEEDS

The success from sowing seeds depends upon three things, the right amount of water, of air, and of heat, which means practically have your soil right as to moisture and texture, your seed sown at a proper depth and where the sunshine can furnish the heat. Soil that is hard and going to bake is not right to start seeds in. Take such soil in the fall and spade in manure or leaf mould and let it rot for several months, and then work up fine. In spring add to a heavy, that is clayey soil, peat or decayed leaf mould, and sand (sharp, fresh-water sand), so that there is one-third loam, one-third sand, and one-third leaf mould. This makes an excellent soil for starting fine seeds. For potting add a small amount of old sheep or cow manure.

SEEDS IN THE OPEN

Seeds of hardy annuals are sown directly in the bed where they are to remain, or they may be sown in boxes and transplanted. Have the ground well worked up and mixed with peat or leaf mould (both may be secured from us) if needed. The soil should be well moistened, not wet and soggy, and not, by any means, dry when the seeds are sown. Put all medium-sized seeds at a depth of one-quarter to one-half inch. Sweet Peas should go deeper. Very fine seeds should be pressed into the soil and a little sand or dry sphagnum moss sifted over them. Water more frequently if the seed is close to the surface and if necessary protect with cheesecloth while watering. Always press or firm the soil after sowing any seed. These seeds are best sown in the open, so as not to be transplanted. Eschscholtzia, Nasturtium, Poppy, also very many others, may be profitably so sown. If the seed be sown directly in the garden, it should be sown in the spring after the soil is well worked and when in moist condition. A slight depression should be made with a stick, the seed sown, and then covered with sandy loam about twice the depth of the diameter of the seed. The sand will prevent the crusting over of the soil after watering.

When up, the plants must be thinned from two to twelve inches, depending on the variety, otherwise they will be weak and spindling. It is a common mistake in the garden to leave plants altogether too thick. Always keep the weeds out.

SEEDS IN BOXES

Always use care in getting a good loam as described above. Use no manure in any seed bed. Boxes 4 inches deep and 18x24 inches is the usual size. See that good drainage is provided by boring holes in the bottom; fill with the fine prepared soil, which should be moist, but not wet enough to stick together when squeezed with the hand. Sow the seed about one-quarter inch deep except fine seeds. Water so as to keep the soil always just moist. Water carefully and regularly. A pane of glass over the box adds more heat, protects from draughts, prevents drying out, and is not necessary except for difficult seeds. The box should be in the sunlight. When the plants are in third or fourth leaf they should be pricked out and reset in another box with plenty of room, for it is important that the plant be of good size, strong and sturdy, when finally transplanted in the garden.

Special care is required by the seeds of tuberous begonias, calceolarias, gloxinias, petunias and primulas, which are fine and delicate seeds. Fill a good-sized flower pot first with some crock or coarse drainage material, then with a little moss or peat, and mainly with prepared soil as described above. Firm the soil, which is of course moist, sow the seeds on the surface, press it in, and sift a light layer of sphagnum moss over the seeds. Do not water this pot, but put it in a box filled with sphagnum moss on all sides and keep this moss wet. The moisture will seep through the sides of the pot in sufficient quantity to germinate the seed. Cover the pot with a pane of glass, which remove gradually later from the young plants. Surrounding by wet moss is also a good expedient to keep moisture even for seeds which require a long time to germinate.

Another mistake in sowing flower, as well as other seeds, is covering too deep. As a general rule, cover only to the depth of the thickness of the seeds; or, with medium-sized seeds, like Balsam, Zinnias, etc., one-quarter to one-half inch is the proper depth. Such fine seeds as Portulacas, Nicotiana, etc., need only to be pressed into the soil with a piece of board or the palm of the hand. Always press the earth down firmly after sowing all flower seeds, else there is danger of their drying up before the roots can get firm hold of the soil. Seeds of the hardier annuals may be sown where they are to grow; but, often, it is preferable to transplant. When the seedlings are first set out they should be watered frequently and should be protected from too much sunlight and from heavy rains. Provide some support for all such annuals as require it.

On account of the long, dry summers in California, it is necessary to apply water very often. Most of our gardens suffer for want of sufficient water. Where possible, it should be applied to the roots only. Do not overwater, but water frequently enough and with such a quantity that it reaches the roots.

With a little study of the garden and the colors and habits of the flowers, a garden as beautiful as those at the Exposition can be had from the use of MORSE'S SPLENDID FLOWER SEEDS at very little cost.

Bird's-eye view of MORSE'S EXHIBITION GARDEN at the P. P. I. E.

This Garden won for C. C. Morse & Co.

THE GRAND PRIZE

the very highest award which it was possible for the Exposition to confer.

Although the Exposition has been past for a year we hate to put from us the remembrance of the beauty and the joy of it. Therefore we are still running this picture of our small but very beautiful part. Our garden was an inspiration to many, and a delight and a lesson to all flower gardeners.

Many of the flowers brought forward by us at that time have been added to our list which follows, whence they will enrich the gardens of the coast.

Many annuals do best if Fall planted. This is especially true for the great interior valleys and for the South. Many plants find the Summer heat too great.

Therefore, plant seeds of hardy annuals this Fall—pansy, sweet peas, phlox Drummondi, Shirley poppy, larkspur, love-in-a-mist, calliopsis, candytuft, cornflower, evening primrose, California poppy, forget-me-not, gaillardia and others. Plant the seeds early enough to allow a month or six weeks before cold weather, and you need have no fear of winter frosts.

NOVELTIES

ANCHUSA ITALICA, Dropmore Variety.

This was one of the beautiful flowers shown by us at the Exposition. A plant of it stood in the center of our "blue" bed, which was so greatly admired. Anchusa Italica is a tall plant, 4 feet, and has beautiful gentian blue flowers, which are excellent for cutting. The individual flowers are not large, but they are continuously borne and make the plant most attractive. Our customers keep inquiring for this beautiful variety. **Per pkt. 15c.**

ASTER, Morse's "Stanford."

It's just the Stanford University color—a dark coppery red! As soon as we saw this aster we recognized its beauty and its most unusual color. In type this aster is a branching comet, of medium height; flowers with petals long and slightly twisted. The plants are just a mass of bloom in the late summer and make an excellent bed. After the seed we have grown is exhausted, no more can be had from any source. Stanford Aster is a shade that has been needed for many color combinations. **Per pkt. 10c.**

Evening Primrose, California

EVENING PRIMROSE, "California"

Oenothera Rubricalyx

Evening Primroses wilt after being picked too quickly to make them good cut flowers, but in a garden they are glorious; especially as they will grow in shade even better than in the sun.

This Evening Primrose, so beautiful as to attract attention at once, came from the hybridizing of Prof. R. Ruggles Gates. We were fortunate to secure the entire crop of seed from the Experimental Grounds of the University of California. Here is Prof. Gates' own description of the Evening Primrose, California:

This new Evening Primrose appeared in my experiments as a sport or mutation several years ago. It now breeds perfectly true and differs from all other Evening Primroses of this group in having striking dark red buds, which contrast beautifully with the bright yellow petals. The whole top of the stem is also red, giving the plant a remarkably ornate appearance. The rarity of this form may be judged from the fact that it has appeared only once, so far as known, in three hundred years of cultivation of Evening Primroses. All red-budded plants are descended from this one individual.

This race is by far the most ornate and beautiful of Evening Primroses and should become very popular in gardens. It is a large plant, three to four feet high, and blooms all summer, producing hundreds of large flowers three and a half inches in diameter. Every botanist speaks of it as the most beautiful of all the Evening Primroses. The garnet buds and golden petals are the same shades which artists prefer to use as a setting for portraits.

R. R. GATES.

Evening Primrose, California. Per pkt. 10c.

Morse's Giant Hybrid Larkspur

CYCLAMEN, Achievement

We believe our customers demand the best and are willing to pay a fair price for it. We accordingly introduce a grand new Cyclamen, which will be a favorite when once known. Its color is a lovely pale salmon pink, a shade which stands out bright under artificial light. Achievement is very free flowering, throwing many fine, large blooms. A plant of it is most pleasing, with its abundant flowers of delicate shade. **Pkt. of 15 seeds 50c.**

LARKSPUR, Morse's Giant Hybrids.

Perennial Larkspurs are very satisfactory because the same plant may be cut back after flowering and started for a second and even a third crop of flowers. Morse's Giant Hybrids have colors from pale lavender to deep violet and centers of varying hues. These Larkspurs are perennial and grow four feet high; their tall flower spikes are most handsome. If grown in a cool spot and given extra cultivation, the spikes may be forced over six feet tall. Slugs are fond of these plants. When setting out, if only a few plants, protect them with collars of tin strips four inches wide. Morse's Giant Hybrid Larkspurs are exceptionally fine. **Per pkt. 15c.**

MORSE'S Flower Seeds 1917

We use the following abbreviations: "h." for hardy; "h. h." for half hardy; "t." for tender; "a." for annual; "b." for biennial; "p." for perennial; "h. a." would be hardy annual, etc.

Cultural directions are given on page 62.

ABRONIA (Sand Verbena). A hardy annual, trailing in habit, about nine inches high, bearing verbena-like clusters of flowers, which are very fragrant. A native of California. Thrives in dry situations and is valuable for rock-work or hanging baskets.
Umbellata. Rosy lilac. **Pkt. 5c.**

ABUTILON (Flowering Maple, or Chinese Bell-Flower). A half-hardy perennial shrub, used generally in greenhouses, but growing into small trees in California. The flowers are beautifully bell-shaped, and appear in white, yellow, rose and orange. **Mixed colors, pkt. 10c.**

ACHILLEA Ptarmica, Double, "The Pearl." (Sneezewort.) One of the best hardy perennials; bears a profusion of small, double, white flowers during the entire season. Fine for cutting and cemetery decoration. Height, 2½ feet. **Pkt. 15c.**

ACROCLINIUM. Very pretty annual, producing white and rose-colored daisy-like flowers in August and September. These are the "Immortelles," so desirable for wreaths and winter bouquets. One foot.
Double mixed, pkt. 5c. Single mixed, pkt. 5c.

ADLUMIA CIRRHOSA (Mountain Fringe, or Allegheny Vine). An attractive and beautiful hardy climber, biennial, flowering the first season; clusters of small, rosy, lilac flowers and pale green feathery foliage. Grows 15 feet tall. **Pkt. 10c.**

ADONIS (Floss Adonis, or Pheasant's Eye). A hardy annual of easy culture, growing about one foot high. Leaves fine cut and feathery; flowers crimson. Seed should be sown in the autumn. **Pkt. 5c.**

ALONSOA Warscewiczii Compacta. This is a bright scarlet annual about 10 inches high. The flowers are borne in twos and threes along the stems; suitable for the border. h. h. a. **Pkt. 5c.**

AMARANTHUS. Hardy annuals, grown especially for their brilliant foliage.

Caudatus (Love Lies Bleeding). Light yellowish-green foliage; long, drooping, crimson flower spikes. Plant three to four feet high. **Pkt. 5c.**

Cruentus (Prince's Feather). Tall spikes of feathery red flowers. Three feet. **Pkt. 5c.**

Tricolor (Joseph's Coat). Plant three feet high, with brilliant leaves in variegated, red, yellow, green, etc. **Pkt. 5c.**

Ampelopsis Quinquefolia. See Virginia Creeper.

Ampelopsis Veitchi. See Boston Ivy.

Angel's Trumpet. See Datura.

Antirrhinum. See Snapdragon.

Aquilegia. See Columbine

ANCHUSA, CAPENSIS. Annual. A clear, bright blue flower with small white eyes, resembling a tall and larger forget-me-not of brighter color; 2 ft. high. Is in flower for a long time. **Pkt. 10c.**

AGERATUM (Floss Flower). A hardy annual of easy culture, especially valuable for bedding, as it is literally covered with blossoms all summer. Sow the seed early in the spring, either in boxes to transplant, or out of doors, and thin to four or six inches.

Blue Perfection. Deep blue, one foot high. **Pkt. 5c.**
Mexicanum, Imperial Dwarf Blue. Eight inches high, flowers blue. **Pkt. 5c.**
Mexicanum, Imperial Dwarf White. Eight inches high, flowers white. **Pkt. 5c.**
Little Dorrit. A perfect mass of blue flowers; plant is six inches high and a foot through. **Pkt. 10c.**
"Little Blue Star." A very dwarf variety, densely covered with small, light-blue flowers, which are purplish-red at center. **Pkt. 15c.**

AGROSTEMA (Rose of Heaven). This plant has silvery white leaves and red flowers, borne on long slender stems; flowers resemble a single pink; two feet; h. p. **Mixed colors, pkt. 5c.**

ALYSSUM (Maritimum). A fragrant, hardy annual, having the odor of honey and bearing spikes of small, white flowers in great profusion throughout the summer and autumn. Useful for borders or early bedding flowers. Sow the seed early in spring.

Common Sweet Alyssum. One foot high, very sweet honey fragrance. **Pkt. 5c; oz. 25c.**
"Carpet of Snow." Pure white, very dwarf and sweet scented. **Pkt. 5c.**
Little Gem. Three to four inches high; the best white flowering border plant. **Pkt. 5c; oz. $1.00.**
Saxatile. A yellowish sort; perennial. **Pkt. 5c; oz. 75c.**

ARISTOLOCHIA SIPHO (Dutchman's Pipe). Strong growing, hardy climber, with large, thick, shining foliage and curious yellowish-brown, pipe-shaped flowers. Seed takes two to three months to germinate. **Pkt. 10c.**

Sweet Alyssum

MORSE'S FLOWER SEEDS—Continued

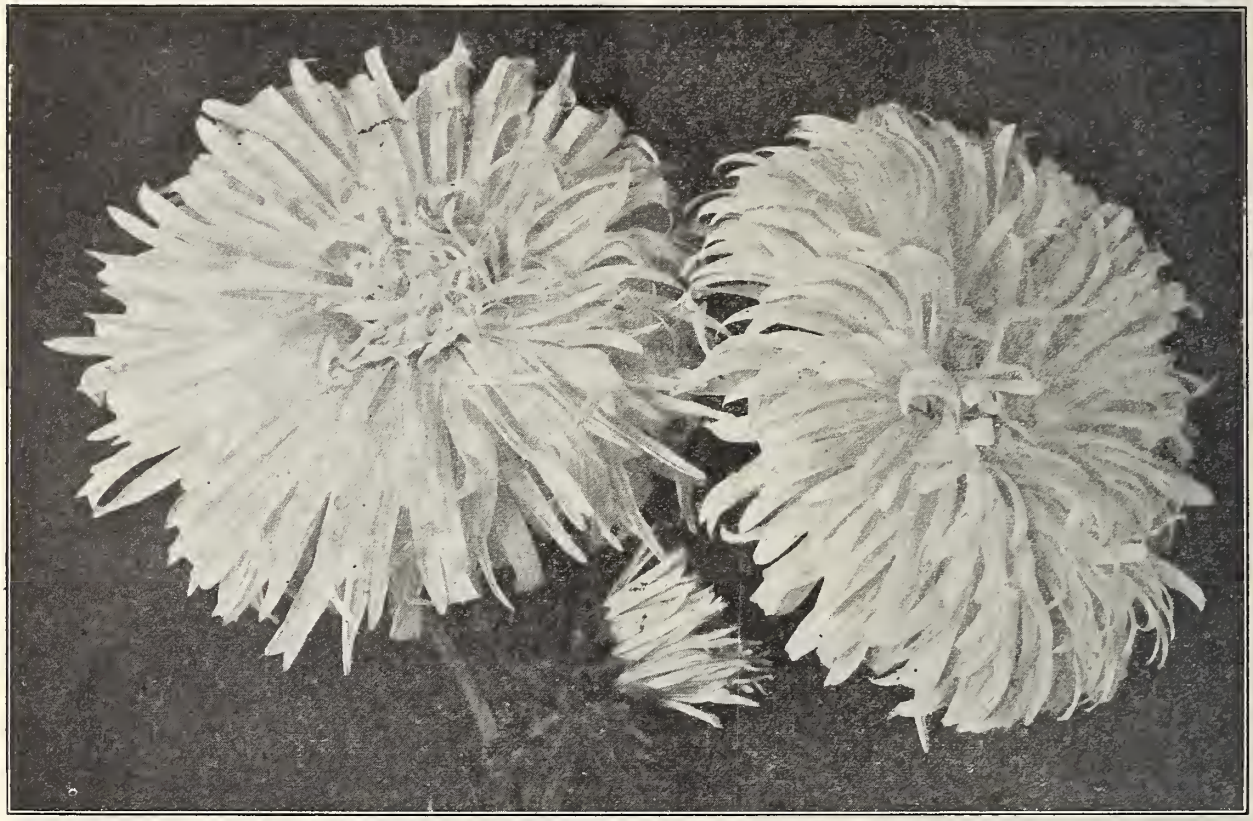
ANEMONE, Single Giant de Caen. The giant French Anemone. Half-hardy perennial. Excellent for cutting. Cup-shaped flowers in blue, red and white. **May and June.** Nine inches. **Pkt. 5c; ¼ oz. 50c.**

St. Brigid (Irish Anemone). Enormous blooms, the size of tulips, with great variety of striking colors. **Pkt. 15c.**

ARCTOTIS GRANDIS (The African Lilac Daisy). A remarkably handsome annual from Africa, forming branched bushes two to two and a half feet in height and breadth; are pure white on the upper surface, reverse of petals pale lilac. **Pkt. 10c.**

ASTERS

Beside the grand new Crego asters, we have a fine assortment of different styles of flower and height of plants of this very popular flower. The different branching Asters are Semples, with straight petals; Morse's Mammoth with slightly twisted petals; Crego's, with much twisted petals, and Pink Rochester, with shaggy twisted petals. Morse's Mammoth have fine large flowers, over 4 inches across and sometimes 5 inches. They have long, strong stems and fine double flowers. Branching Asters are more satisfactory, we believe, for most gardens than the smaller, compact types. Plant some of our fine new Asters this year for late summer flowers. Sow Aster seed in boxes in January and transplant to the garden about April 1-15th, or sow in the open in April; half-hardy annual.



CREGO'S GIANT ASTERS

This new Mammoth Aster pictured above, with its huge flowers from 4 to 5 inches across, has won a place for itself in the past year. Thousands of our customers have proved that with just ordinary garden care asters of the rarest beauty may be had in their gardens. Briefly, Crego's Asters have large flowers with beautifully twisted petals and long stems, good for cutting and a delight in the garden.

Crego's Giant, Rose Pink, Pkt. 15c. **Crego's Giant, Shell Pink, Pkt. 15c.**
Crego's Giant, Purple, Pkt. 15c. **Crego's Giant, White, Pkt. 15c.**

Collection of any two for 25c or one each of the four Crego's Giant Asters 45c; mixed pkt. 15c.

MORSE'S MAMMOTH ASTERS. Twisted Petal Type

Morse's Mammoth Asters have petals just a little broader than Crego's and less twisted. This entirely supersedes the Giant Comet type, which we will list no more. Morse's Mammoth Asters have fine large flowers, over 4 inches across and sometimes 5 inches. They last well when cut and are away ahead of the Giant Comet type. Morse's Mammoth Aster is entirely new and is different from all of the other Asters, and has a great charm in the delicacy of the flower. Every garden needs some of these new Asters.

Morse's Mammoth White, per pkt. 20c.
Morse's Mammoth Shell Pink, per pkt. 20c.
Morse's Mammoth Lavender, per pkt. 25c.
Morse's Mammoth Rose, per pkt. 20c.
Morse's Mammoth Purple, per pkt. 25c.
Collection, one packet of each of the above, for 85c; any two for 35c.

ASTERS—Continued

PINK ROCHESTER. This variety is the first to bloom of the very large asters. The plants are strong and vigorous, with many branches. Flowers vary in size, from medium to very large, often 4½ inches across, and are borne on long, graceful stems. The flowers are white when first open, changing to a soft pink with a shade of lavender. Its profusion of bloom and the light, airy effect of the flowers are very charming. The petals are slender and very much twisted, giving the flower the appearance of a great shaggy chrysanthemum. Asters are fine flowers for mid-summer gardens, and Mikado Pink Rochester is a new and rare sort. **Pkt. 20c.**

ASTER, New England Perennial (Michaelmas Daisies). In splendid assortment, four to five feet. Very handsome, hardy wild flowers of New England; fall blooming. Blue, lilac and pinkish. **Mixed, Pkt. 15c.**

ASPARAGUS. Seeds start slowly and should be soaked in good warm water before sowing.

Plumosus Robustus. The tall asparagus fern with delicate feathery foliage. **Pkt. 10c; 100 seeds 75c.**

Plumosus Nanus. A dwarf variety and sometimes preferred on account of its beautiful dense sprays of feathery green. **Pkt. 10c; 100 seeds 75c.**

Sprengeri (Emerald Feather). An early, easily grown, feathery-leaved variety, with drooping branches. The variety for hanging baskets. **Pkt. 10c; 100 seeds 50c.**

ASPERULA ODORATA (Sweet Woodruff). An old-fashioned favorite, grown for its fragrant leaves and stems, which, when dried, have an odor not unlike new-mown hay, and are used for putting among clothes, etc. Used in Germany to flavor the "Maitrank," or May wine. Best grown in semi-shaded positions. Flowers white; perennial. **Pkt. 5c; ¼ oz. 25c.**

AURICULA (Primula auricula). A great favorite in England, where flower shows are held of this plant alone. Extra choice mixed from a prize collection. **Pkt. 15c.**

AUSTRALIAN PEA VINE (Dolichos Lignosus). A rapid growing evergreen climbing perennial, flowering freely in clusters of rose pea-shaped flowers. For covering arbors, trellises, etc., they have no superior; h. h. **Pkt. 10c; oz. 60c.**

Bachelor's Button. See Centaurea Cyanus.

BALLOON VINE, or LOVE-IN-A-PUFF. Climbing annual, with small inferior flowers. The seed pods are curiously swelled or puffed, and are quite attractive. **Pkt. 5c; oz. 25c.**

BALSAM, or LADY'S SLIPPER. A tender annual, with brittle stems and foliage. Grows about 12 inches high. Flowers both single and double, in bright colors and variations; are wax-like and very attractive. The individual blossoms floating in a dish of water exhibit their beauty to the best advantage.

Camellia Flowered. Mixed. The largest double variety. **Pkt. 5c; ½ oz. 50c.**
Camellia Flowered. White. Pkt. 10c.

DOUBLE VARIETIES, AS BELOW, ALL **Pkt. 10c.**
Lavender. Red and White Spotted.
Peach Blossom (Shell Pink). **Snowball.**
Collection of five varieties, 35c.
Mixed Tall Doubles. Pkt. 5c; ½ oz. 50c.
Dwarf Double. Pkt. 5c.

BARTONIA AUREA (Golden Bartonia). A hardy annual, growing about two feet high and bearing golden-yellow flowers, which have a metallic luster when the sun shines on them. Is a native of California. Sow the seed where the plants are to remain, since it does not transplant easily. **Pkt. 5c.**

BELLIS PERENNIS (Double Daisy). The little daisy we all like growing in lawns; used also for borders; h. p.; six inches.

Extra Double White, or Snowball. A clear white variety. **Pkt. 10c; ⅛ oz. 75c.**

Longfellow. Double dark rose. **Pkt. 10c; ⅛ oz. 75c.**

Extra Double. Mixed. Pkt. 10c; ⅛ oz. 65c.

Giant Ranunculus Flowered. A new and giant-flowered daisy which is quite distinct from the little lawn daisy. The flowers are two to three inches across, of a pretty red shade and may be used as cut flowers. **Pkt. 25c.**

SEMPLES, or GIANT BRANCHING. MORSE'S STRAIN. The plant grows 18 inches high and about 18 inches in width, and the blossoms, which are large and full-petaled, are borne on long stems or branches. Comes into flower late in the autumn. Best colors. **Any color, pkt. 10c; ¼ oz. 50c.**

Aster, Violet King

Carmine	Pink or Rose
Lavender	White
Violet King	Light Blue
Crimson	Purple

Mary Semple (very light pink).
Collection nine varieties, 70c.
Mixture of above colors, pkt. 10c; oz. $1.75.

BEAN, Scarlet Runner. A popular climber; the seed is edible and much esteemed. Flowers scarlet; beans black and lake splashed. **Pkt. 10c.**

BEGONIA

BEGONIA. Tender perennial, usually grown in the greenhouse. Some varieties are especially attractive on account of their foliage, but most varieties have exquisitely beautiful wax-like flowers, both single and double. The seed is very small and rather difficult to germinate. It is also very expensive, some strains being worth far more than their weight in gold.

FIBROUS ROOTED VARIETIES

For outdoor culture, having beautiful leaves and bearing clusters of small, waxy flowers.

Vernon. Deep-red flowers and dark-purple foliage, often used for borders and for bedding; half-hardy. **Pkt. 10c.**

TUBEROUS ROOTED VARIETIES

For greenhouse and pot culture, having large, waxy flowers in brilliant colors. Many prefer to start bulbs in December and January.

Double Varieties. Mixed. **Pkt. 25c.**
International Prize. The finest large flowered single mixture. **Pkt. 35c.**

Single Varieties. Mixed. **Pkt. 25c.**

BIGNONIA (Trumpet Vine). Magnificent, hardy perennial climber, with brilliant scarlet or yellow flowers; a most ornamental and effective covering for walls, houses, etc. The scarlet comes in plants only.

Tweediana. Yellow. **Pkt. 10c.**

Border Pinks. See Dianthus Plumarius.

BOSTON IVY OR JAPANESE IVY (Ampelopsis Veitchi). The popular ivy which covers so many buildings. It clings to brick and wood without support. The leaves are heart-shaped and are off the vine for only two months in the winter. **Pkt. 10c; oz. 50c.**

BRACHYCOME (Swan River Daisy). A hardy annual, growing from 6 to 10 inches high and producing an abundance of prett yblue and white flowers. **Pkt. 5c.**

Candytuft, White Rocket

BROWALLIA. A half hardy annual, making a fine bedding plant. Blooms profusely. The flowers are bright ultramarine blue, and also sky blue with white center. **Mixed, pkt. 5c.**

CACALIA (Tassel Flower). A beautiful and profuse flowering plant, with tassel-shaped orange and scarlet flowers; fine for mixed borders. Hardy annual. **Pkt. 5c.**

CALAMPELIS (Bugle Vine). A well known beautiful annual climber; trained to a trellis or south wall it is an ornamental object throughout the summer, its bright orange tubular flowers contrasting effectively with the delicate green of the foliage. **Pkt. 10c.**

CALANDRINIA Umbellata. Portulaca-like plants, fond of sunshine, well suited for rock-work. Vivid crimson violet. Height one-quarter foot; perennial. **Pkt. 10c.**

CALCEOLARIA. A tender perennial, used largely in greenhouses and conservatories. Is not of easy culture, but a very desirable flower. Bears a large profusion of small, pocket-shaped flowers, many of which are beautifully tigered or spotted. There is a great variety of shades and colors in various markings.

Grandiflora. Large-flowered, self-colored, profuse flowers. **Pkt. 25c.**

Tigered and Spotted. Mixed. **Pkt. 25c.**

Rugosa Hybrid. The small-flowered Calceolaria, hardy and fine for out of doors; colors bright yellow, brown, etc. Two feet. **Crop failed.**

CALENDULA (Pot Marigold). Very hardy annual, one foot high, blooming freely at any time of year and for several months. Is of the easiest culture and is desirable for rather inferior soils, where less sturdy flowers do not thrive.

Double Mixed. A good mixture of 8 or 10 different shades of yellow, some clear colors and some shaded and striped. **Pkt. 5c; oz. 15c.**

Lemon King. Pkt. 5c.

Meteor. Large double bright yellow flowers, striped with orange. **Pkt. 5c.**

Prince of Orange. A fine deep orange. **Pkt. 5c.**

California Poppy. See Eschscholtzia.

CALLIOPSIS. A hardy annual, growing about three feet high, and valuable for bright bedding effects, or for cutting. Leaves are narrow and stems slender. Blossoms single and about two to four inches in diameter.

Atrosanguinea. Velvety dark maroon. Plant is tall and flowers are small; one of the old-fashioned flowers. **Pkt. 5c.**

Golden Wave. A large flowering light yellow variety. **Pkt. 5c; oz. 60c.**

CALLIOPSIS—Continued

Bicolor Hybrida Semiplena. Semi-double flowers of garnet and yellow. The old fashioned small Coreopsis. **Pkt. 5c.**

Mixed. A gorgeous mixture of golden yellow, brown, maroon and other shades. **Pkt. 5c; oz. 60c.**

Lanceolata. See Coreopsis.

Tiger Star (Nana Compacta Radiata). A rich, bronze striped and mottled yellow; a bright flower with a great deal of contrast; dwarf. **Pkt. 10c.**

Tom Thumb Beauty. Darker yellow than Golden Wave and with a large crimson center. The plants are dwarf and compact and covered with yellow and red blossoms. The bed with Calliopsis was greatly admired. **Pkt. 10c.**

Tom Thumb Crimson King. A companion to Beauty in habit and growth. The flowers are a rich dark crimson and of large size. **Pkt. 10c.**

CANARY BIRD FLOWER (Tropaeolum Canariense). A tender climbing annual of the Nasturtium family. Blossoms have curiously winged petals and are light yellow. **Pkt. 5c; oz. 40c.**

CANNA. Mixture of the popular varieties. Flowers in red, yellow, and all plants have large ornamental leaves. **Mixed, pkt. 5c.**

Bronze Leaved. Mixed, pkt. 10c.

Green Leaved. Mixed, pkt. 10c.

Calliopsis, Golden Wave

CANDYTUFT (Iberis). A hardy annual, growing about 6 to 18 inches high, according to the variety. The blossoms are borne on variously long spikes, and the newer varieties are quite large flowering and very fragrant. Of easy culture and valuable for bedding or massing.

Common Sweet Scented. Small white flowers. **Pkt. 5c; oz. 15c.**

Carmine, branching. **Pkt. 5c.**

Lilac, branching. **Pkt. 5c.**

Purple, branching. **Pkt. 5c.**

Dwarf or Tom Thumb. White. Plant very dwarf. **Pkt. 10c; oz. 30c.**

Dwarf or Tom Thumb. Hybrids. Dwarf branching, various shades of white, rose, purple and crimson. **Pkt. 10c.**

White Rocket. Long spikes and large flowers. **Pkt. 5c; oz. 25c.**

Giant Hyacinth Flowered, or Improved Empress. Very large heads and long spikes of white flowers. An improved strain of Giant Empress and excellent for cut flowers. **Pkt. 10c; ¼ oz. 25c; oz. 75c.**

Gibraltarica, Perennial Lilac. Shading to white, **Pkt. 10c.**

Mixture of all colors. Pkt. 5c.

CARNATIONS

A half hardy perennial used generally for greenhouse florists' trade in winter and for a garden favorite in summer. There are a large number of varieties and colors, but the early flowering mixtures are recommended for out-of-door culture. Sow the seed early in the year and transplant in March or April. For florist varieties see our plant department.

Chabaud's Everblooming. Earliest dwarf French type of perpetual, flowering in five to six months after seed is sown. The flowers are double and very freely borne. In mixed colors. **Pkt. 15c.**

German Extra Fine Double Mixed. A splendid strain, containing all the various types and colors mixed of the Perpetual or Tree Carnations. **Pkt. 15c.**

Picotee. Extra fine double mixed. White, edged with colors, or striped and splashed. Contains many rare sorts never seen at a florist's. **Pkt. 50c.**

Vienna. Double dwarf mixed, double border carnations; early flowering. All colors. **Pkt. 10c.**

Choice Double Border. Mixed colors. **Pkt. 15c.**

MARGUERITE. An extra vigorous race, especially adapted for out-of-door culture. The plants are trim in habit, perpetual, and flower abundantly in five months from sowing the seed. Marguerite Carnations are highly fragrant, and have beautiful double flowers.
White. Pkt. 10c. Striped Varieties. Pkt. 10c.
Light Red and Pink. Pkt. 10c. Dark Red. Pkt. 10c.
Yellow and Yellow Ground. Pkt. 20c.
Collection. One pkt. of each of above, 5 for 45c.
Mixed. Pkt. 10c; oz. $1.00.

MARGUERITE GIANT, MORSE'S. An improved strain, with flowers frequently 2½ inches to 3 inches across; strong growers, free blooming.
White Perfection, pkt. 25c. Scarlet, pkt. 25c.
Yellow, pure. Pkt. 25c..

CANTERBURY BELLS

(Campanula Medium). A hardy biennial, blooming the second year from seed, or the first year, if sown early. Of easy culture, but preferring rich, moist soil. Grows about 3 feet high and bears double and single varieties of blue, white, purple and red flowers. **Single Mixed, pkt. 5c; Single White, pkt. 5c; Single Pink, pkt. 5c; Single Blue, pkt. 5c.**
Double Mixed, pkt. 5c.

Carpatica (Carpathian Harebell.) A dwarf perennial; nine inches; for rockeries, edges and beds. Blue and white. **Mixed. Pkt. 5c.**

CUP AND SAUCER TYPE. In this variety the outer petal forms a brim like a saucer.
Light Blue, pkt. 10c. Pink, pkt. 10c. Pure White, pkt. 10c. Mixed, pkt. 10c; ¼ oz. 50c.

CASTOR OIL BEANS—Cont'd

Gibson's dark red. Pkt. 5c; oz. 15c.
Sanguineus. Tricolor. Has blood-red stocks and green leaves, with red veins. **Pkt. 5c; oz. 15c.**
Zanzibarensis. Mixed. A very large-leaved variety, deep green and bronze, growing 10 to 15 feet high. **Pkt. 5c; oz. 20c.**
Mixture of all varieties. Pkt. 5c; oz. 15c.

CENTRANTHUS. The flowers are small, pink, salmon color or white, borne in clusters on light-green, almost transparent stems. Easy to raise from seed in open ground. **Mixed, pkt. 5c.**

CELOSIA CRISTATA, or COCKSCOMB. A half hardy annual, growing six to eight inches high, bearing a wide, wavy blossom that resembles a cock's comb. In brilliant colors and fine for massing or border work.

Persicifolia. Peach-bell. Perennial; four feet; large flowered. **Mixed, pkt. 10c; Blue, pkt. 10c; White, pkt. 10c.**

Pyramidalis. Chimney Bellflower. Large flowers on tall (six foot) spikes; blooms late; perennial.
Blue, pkt. 10c; White, pkt. 10c.

CASTOR OIL BEAN (Ricinus). A tender annual growing from 6 to 15 feet high and bearing large, green, deep purple and brown leaves. The seed pods resemble a prickly fruit. Of the easiest culture. Individual plants with plenty of room look best.

Castor Bean—Zanzibarensis

Dwarf Mixed. Several shades of red and yellow, mixed. **Pkt. 15c.**

Dwarf New Giant Empress. A rich, crimson variety, with dark foliage and very wide combs. **Pkt. 10c.**

Glasgow Prize. One of the best strains. **Pkt. 10c.**

CELOSIA PLUMOSIS, or Feathered Cockscomb. This species grows two or three feet high, and bears long feathery plumes in brilliant colors. Mixed. **Pkt. 5c.**

Magnificent (Thompson's). A new variety, superior to the older sorts, bearing grand spikes; flowers in mid-summer. Mixed. Many colors. **Pkt. 10c.**

CELOSIA PLUMOSIS—Continued.

Magnificent Crimson. A bright shade. **Pkt. 10c.**

Magnificent Golden Yellow. A fine contrast to the crimson. **Pkt. 10c.**

CENTAUREA

A hardy annual embracing a number of species, some being grown only for their foliage. One and a half to two feet high. Sow the seed early in boxes and transplant in March or in the open in April. Except the white-leaved sorts, all make excellent cut flowers.

Cyanus (Bachelor's Button, or Bluebottle, or Corn Flower). Of easy culture. Sow the seed where it is to remain and thin to three or four inches.
Mixed. Pkt. 5c; oz. 25c.

Emperor William (Large Blue). Pkt. 10c; oz. 35c.

Pink, pkt. 5c. White, pkt. 5c.

Imperialis (Royal Sweet Sultan). The finest of all Sweet Sultans; the plants are very strong and bear giant flowers on stiff, long stems; excellent for cutting, and lasting, when cut, unusually well. **Mixed, pkt. 10c; ½ oz. 50c. Purple Shades, pkt. 10c. White, pkt. 10c.**

Marguerite. A large, white variety of the Imperialis class. Fragrant and pretty. **Pkt. 10c.**

Moschata, or Sweet Sultan. A well-known type. In white, yellow, lavender and purple. Blossoms very fragrant. **Mixed, pkt. 5c.**

Suaveolens. Yellow Sweet Sultan. **Pkt. 10c.**

Gymnocarpa. Called Dusty Miller; leaves silvery gray; deeply cleft; 1½ feet; perennial. **Pkt. 5c.**

Candidissima, White Leaved or Dusty Miller. Grown for its silvery white foliage, leaves broader and less cleft; one foot; perennial. **Pkt. 10c.**

CHEIRANTHUS ALLIONI. This has gorgeous orange flowers resembling a wallflower. Although a perennial, it flowers easily from seed the first summer. Beautiful for a border or in a rockery; 12 inches high. **Pkt. 10c.**

CLARKIA

This hardy annual is of easy culture, bearing bright rose, white, or purple flowers in great profusion. The single type is native to California and is a wild flower. Seed sown in the fall will give early blossoms in the spring. Seed can be sown almost any time. The Elegans varieties grow 2 feet tall in spikes; the seedlings should be pinched back twice to make bushy plants, once to 3 inches and again to 9 inches. Allow enough space in the garden; flowers are borne along the stems. The Pulchella varieties are more compact, and as the flowers are on pedicels they show less leaves.

Carmine Queen: Elegans. Just loaded with light carmine double flowers along the stems. **Pkt. 10c.**

Double White: Pulchella Tom Thumb. A perfect mass of round double fluffy white bloom. Very fine indeed. **Pkt. 10c.**

Coboea Scandens

Double Clarkia, Vesuvius

Mrs. Langtry: Pulchella. This is a large single Clarkia, with four petals arranged like a Greek cross. Its color is white with light purple center. A handsome flower. **Pkt. 5c.**

Double Elegans Mixed, pkt. 5c. Single Elegans Mixed, pkt. 5c.

Vesuvius: (Elegans) 15 to 18 inches high. This flower is a bright coral pink, shading deeper and more intense at center. The flowers are double like rosettes, borne an inch apart on the stiff stems. The stems are red and set off the color of the flower nicely. Flowers are 1½ inches across. **Pkt. 10c.**

CLEOME, or GIANT SPIDER PLANT. A hardy annual, growing four to five feet high and bearing in profusion rose-purple blossoms that are shaped something like a spider. **Pkt. 5c.**

CLEMATIS. A popular hardy perennial climber. An old favorite, and justly so, for there are few garden climbers that give more satisfaction.
Large Flowered Mixed. Pkt. 10c.
Flammula. Feathery white. **Pkt. 10c.**
Jackmanii. Largest flowered hybrids in various colors. The blue does not come true from seed. **Pkt. 15c.**

CHRYSANTHEMUM

The double perennial Chrysanthemum so much admired at the florists is the sort we call Japanese Hybrids. We sell plants of these late in the spring. The annual varieties are smaller flowered, upright in growth and of easiest culture, coming into bloom early.

ANNUAL VARIETIES. Growing 1½ to 3 feet high. Seeds should be planted early and the plants set out in April. Single varieties sometimes called **"Painted Daisies."** Very attractive. **Mixed, pkt. 5c.**

Coronarium Double. Mixed. **Pkt. 10c.**

Coronarium White. Beautiful for cut flowers. **Pkt. 10c.**

Coronarium Yellow. Flowers early and very freely. **Pkt. 10c.**

CHRYSANTHEMUM—Continued

The tricolor type has large single flowers with different colors in rings.

Tricolor Burridgeanum. Yellow center, crimson maroon band and white tips. **Pkt. 5o.**

Tricolor Eclipse. Golden yellow with purple ring; very striking. **Pkt. 5c.**

Tricolor White. Pkt. 5c. Tricolor Mixed. Pkt. 5o.

Evening Star (Helios). This is a tall plant with large Marguerite-like flowers of pure golden yellow, three inches in diameter. Flowers are borne singly and are excellent for cutting. **Pkt. 10c.**

Morning Star. Like Evening Star only of different color. This is a soft yellow or primrose color. **Pkt. 10o.**

Northern Star. Another variation of these beautiful Marguerites. Fine large ivory-white flowers with sulphur zone. **Pkt. 10c.**

PERENNIAL VARIETIES. Growing 2½ to 3 feet high. Hardy and of easy culture.

Japanese Hybrids. A mixture of the large-flowering, florists' varieties. These mixtures are the large, autumn flowers used in exhibitions and by florists. They are usually grown from cuttings and do not come true from seed. **Pkt. 25c.**

COLEUS. A tender perennial, growing about 10 to 18 inches high, and grown for its beautiful, bright-colored velvety leaves. Valuable for window garden or pots, and can also be grown out of doors if taken up in winter.

Extra Large Leaved Mixed. Pkt. 15c.

Ornatus. The best large-leaved variety. **Pkt. 15c.**

Morse's Exhibition. A beautiful and gorgeous strain. **Pkt. 25c.**

COLLINSIA. A free-flowering and easily-grown annual, growing from one to two feet; flowers white, crimson, purple, etc. A California wildflower. **Mixed, pkt. 5o.**

CINERARIA. This is the plant with heads of daisy-like flowers in purple, red, blue or white, with a dark eye surrounded by a ring; does very well in shaded positions, under trees, etc. Cinerarias are much prized as pot plants and do well in a cool greenhouse; tender. Sow seed in summer in boxes or cool house. One to two feet high; t. b.

Hybrida Mixed. The best variety, having large flowers and brilliant colors. **Pkt. 25c.**

Grandiflora Dwarf. Mixed. **Pkt. 25c.**

Grandiflora Stella. With twisted petals. **Pkt. 25c.**

Maritima Candidissima Dusty Miller. Silvery foliage; hardy border plant; 2½ feet. **Pkt. 5c.**

COBOEA SCANDENS. A half hardy climbing perennial, with large leaves and large bell-shaped flowers. Blossom is green until nearly grown, when it turns bright-purplish blue. Grows about 30 feet long, and is very desirable for covering a large lattice. A native of Mexico. **Pkt. 10c.**

Cockscomb. See Celosia Cristata.

COREOPSIS. No flower is longer in bloom during the whole season than Coreopsis. It is a most excellent cut flower, lasting well; color, bright yellow; flowers large and showy. Hardy perennial, easily grown from seed; 2½ feet.

Lanceolata Grandiflora. Pkt. 10c.

COSMOS

COSMOS. One of the very finest late summer and fall flowers; excellent cut flowers. The bushes grow tall, six to eight feet, and are loaded with large showy blossoms, five inches in diameter, in white, pink or crimson. Cosmos should be in every garden. Sow the seed early and transplant, or later in spring where it is to remain. Hardy annual.

Early Flowering Dawn. White, slightly tinted with pink. **Pkt. 10c; oz. 50c.**

Early Flowering Mixed. Pkt. 10c; oz. 50o.

GIANTS OF CALIFORNIA.
Pink, pkt. 10c; oz. 50o.
Crimson, pkt. 10c; oz. 50c.
White, pkt. 10c; oz. 50c.
Mixed, pkt. 5c; oz. 35o.

Lady Lennox. Extra large bright pink; plant not so tall. **Pkt. 10c.**

Klondyke. A late blooming variety, with bright yellow blossoms. **Pkt. 10o.**

COSMOS—Giants of California

Coreopsis Grandiflora

COLUMBINE (AQUILEGIA)

A hardy perennial growing about two feet high and bearing an immense variety of colors on long, smooth stems. Stands partial shade very well.

California Hybrida. Large yellow flowers, orange spurs; an improvement on our native sort. **Pkt. 15c.**

Chrysantha. Pure golden yellow, single long spurs; three feet. **Pkt. 10c.**

Coerulea (Rocky Mountain Blue Columbine). Fine deep blue and white; long spurs. **Pkt. 10c.**

Skinneri (Mexican Columbine). Very handsome and quite distinct; spurs and sepals long, crimson and light green; three feet. **Pkt. 25c.**

Long Spurred Hybrids Mixed. Showy. **Pkt. 10c.**

Collection of five fine sorts above for 45c.

Single Mixed (A. Vulgaris). Pkt. 5c.
Double Mixed (A. Vulgaris). Pkt. 5c.

Convolvulus. See Morning Glory.

CYCLAMEN. A tender, bulbous perennial, used in greenhouses and window gardens. It is easily grown from seed. Sow in the fall or early spring.

Persicum Giganteum. Mixed. Very large flowers and very free blooming. **Pkt. 25c.**

Album. Pure white. Pkt. 25c.

Rubrum Red. Pkt. 25c.

Crimson King. A new variety. **Pkt. 25c.**

Papilio. Butterfly type, fringed edges. **Pkt. 25c.**

CYPRESS VINE (Ipomoea Quamoclit). A tender, climbing annual, with soft fern-like foliage and small star-like flowers, in red and pink, or white.

Scarlet, pkt. 5c; oz. 30c.
White, pkt. 5c; oz. 30c.
Mixture of several colors, pkt. 5c; oz. 30c.

DAHLIA. A well-known and popular late summer and autumn flowering plant. Is grown from seed or propagated from the bulbous roots. The seed may be planted early in the hotbed and the plants set out in May after all danger of frost is over. By sowing the seed early the plants may be made to bloom the first year.

Cactus. Mixed, double, with pointed petals. **Pkt. 10c.**

Double. Mixed. **Pkt. 10c.**

Single. Mixed. The most easily grown and also the most satisfactory from seed. **Pkt. 10c.**

DAISY, SHASTA DAISY. A fine perennial plant, bearing large white single blossoms, with yellow centers; an excellent cut flower and admired everywhere. Soak seed in warm water before sowing. **Pkt. 15c.**

Alaska. One of Burbank's new selections. **Pkt. 25c.**

Daisy, Double. See Bellis Perennis.

DATURA (Trumpet Flower, or Horn of Plenty. A tender annual, growing three feet high. Flowers large and trumpet-shaped; very fragrant.

Chlorantha Fl. Pl. Double golden-yellow blossoms. **Pkt. 5c.**

Cornucopia. Blossoms single, white inside, shading to purple. **Pkt. 5c.**

Delphinium. See Larkspur.

DIANTHUS, OR PINKS. Hardy annuals, about one foot high, and bearing beautifully colored single and double blossoms in profusion all summer. Sow seed early in boxes and transplant, or sow in rows where the plants are to remain and thin. See also Carnation.

Chinensis (China or India Pink).
Double White, pkt. 5c. Double Mixed, pkt. 5c.

Heddewigi (Japanese Pink). Finest single, mixed, pkt. 5c. Finest double, mixed, pkt. 5c.

Diadematis Fl. Pl. (Double Diadem Pink). Large double flowers in many colors. **Pkt. 5c.**

Mourning Pink. Very dark crimson, margined pure white. **Pkt. 5c.**

Laciniatus. Single fringed varieties. **Pkt. 5c.**

Mixture of all single varieties. Pkt. 5c; oz. 50c.

Imperialis (Dbl. Imperial Pink). Very large. **Pkt. 5c.**

Plumarius (Grass Pink, Pheasant Eye or Scotch Pink). A single hardy perennial pink, with fringed edge; light colored flowers, with a darker center; various colored. The old-fashioned garden favorite. **Pkt. 5c.**

Plumarius Double (Double Clove Pink). A double-flowered sort, in various colors like the single. The foliage makes a pretty border, while the flowers are delightfully fragrant, like cloves. **Pkt. 10c.**

Dianthus, Barbatus. See Sweet William.

Dianthus, Caryophyllus. See Carnation.

Digitalis, Dimorphotheca and **Dolichos.** See next page.

ECHINOCYSTIS (Wild Cucumber Vine). One of the quickest growing vines we know of, attaining a height of 30 feet in a season; white fragrant flowers, borne in great profusion, followed by an abundance of ornamental prickly seed pods; foliage very dense, on which account it is most desirable where much shade is desired. **Pkt. 5c; oz. 20c.**

EDELWEISS (Leontopodium Alpinum). The true white-leaved famous Edelweiss of the Alps; perennial dwarf; six inches. **Pkt. 15c.**

EUPHORBIA. A hardy annual, growing four to six feet high, and esteemed for its beautiful foliage. The blossoms are inconspicuous.

Heterophylla. Called **Mexican Fire Plant** or Annual Poinsettia. Smooth, glossy leaves, turning scarlet late in the summer. **Pkt. 10c.**

EVERLASTING FLOWERS. See **Acroclinium, Gomphrena, Helichrysum, Honesty, Rhodanthe, Statice, Xeranthemum.**

Evening Primrose. See Oenothera.

Everlasting Pea. See Lathyrus Latifolius.

Flax. See Linum.

FEVERFEW. Matricaria Capensis. Called Double Feverfew. A plant growing 18 inches high and bearing profusely pure white, very double flowers. **Pkt. 5c.**
See also **Pyrethrum** for edging varieties.

Flowering Maple. See Abutilon.

Flowering Sage. See Salvia.

Morse's Extra Golden California Poppy
Eschscholtzia Californica

ESCHSCHOLTZIA

OR CALIFORNIA POPPY

A hardy annual with fine-cut, feathery foliage and beautiful velvety cup-shaped flowers. Grows from 1 to 1½ feet high, and blooms profusely. Seed may be sown in the fall and any time thereafter till April, and blossoms may be had from early in January till late in summer. Of the easiest culture. Any soil will do, but the better the soil, the larger the plants and blossoms. It is best to sow the seed in the garden where the plants are to remain, as they do not transplant easily. The beautiful State flower of California.

Californicus. The bright, orange-yellow, wild variety. **Pkt. 5c; oz. 20c; lb. $2.25.**

Carmine King. There is nothing prettier than this Eschscholtzia, which is a rich carmine rose. **Pkt. 10c.**

Crimson Flowering. Pkt. 10c.

Crocea. Pure deep orange. **Pkt. 5c; oz. 25c.**

Erecta Mandarin. Brownish gold, erect growing plant. **Pkt. 5c.**

EXTRA GOLDEN, MORSE'S. An extra fine selection of the dark wild California Poppy. This is the finest colored Eschscholtzia and its richness of color is unequalled. Should be in every garden. **Pkt. 5c; oz. 30c; lb. $3.00.**

Golden West. Very large, orange-colored blossoms, shading to canary-yellow at the edges. **Pkt. 5c; oz. 25c.**

Mandarin. Blossoms are copper colored outside and bright yellow inside the petals. **Pkt. 5c; oz. 25c.**

Rose Cardinal. White inside, light pink outside. **Pkt. 5c; oz. 40c.**

ESCHSCHOLTZIA—Continued.

White. Large, ivory white. **Pkt. 5c; oz. 25c.**

Mixed Yellows. A mixture of the popular orange and yellow varieties. **Pkt. 5c; oz. 20c.**

Collection one pkt. each of 10 kinds for 45c.

Mixture of all varieties. Pkt. 5c; oz. 20c; lb. $2.25.

Bush Eschscholtzia. See Hunnemannia.

DIGITALIS, or FOXGLOVE. A hardy perennial, blooming the second year from seed. Grows usually about 3½ feet, although in very rich soil sometimes six feet. The bell-shaped flowers are borne on long spikes, and come in shades of purple, lavender, rose and white; all spotted lightly inside the blossom. Thrives best in cool, shady locations. **Fine mixed, pkt. 5c; oz. 50c.**

DIMORPHOTHECA AURANTIACA (African Golden Daisy). A plant introduced in the last few years which is a great favorite on account of its handsome golden-orange flowers, with black zone at base of petals, which are borne most profusely. 2½ inches across; plants 12 to 15 inches high and doing well in dry situations. Hardy annual. **Pkt. 10c.**

Dimorphotheca Aurantiaca Hybrida. Our recent novelty. Beautiful shade of purest white, reddish and bluish white tints, sulphur, lemon and bright golden yellow, bright orange, reddish yellow, changing to pale salmon-rose and many other shades. Fine for borders or bedding. Sow seed in the open ground early in the spring. **Per sealed pkt. 25c.**

DOLICHOS, or HYACINTH BEAN. Tender, climbing annual. Grows rapidly and is valuable for covering a trellis. Flowers in purple or white; are borne on long stems, the individual blossoms resembling the bean flower, and the ornamental pods resemble bean pods. Sow seed in open ground late in April.

Daylight. The best white. **Pkt. 10c.**

Darkness. The best purple. **Pkt. 10c.**

Lablab. Mixed. **Pkt. 10c.**

Dusty Miller. See Centaurea and Cineraria.

Dimorphotheca Aurantiaca

FOUR O'CLOCK. A hardy annual about two feet high, of the easiest culture. Seed should be sown in the open and thinned to one foot. An old-fashioned favorite, with trumpet-shaped flowers freely borne.
Mixture of all colors. Pkt. 5c; oz. 20c.
Tom Thumb. Dwarf plant, mixed colors. **Pkt. 5c.**
Variegated and striped leaved. Mixed. Pkt. 5c.

FOXGLOVE. See Digitalis.

FUCHSIA (Ladies' Eardrop). A well-known plant of easy culture in pots for the conservatory, parlor decoration, or the open ground. Start seed early under glass.
Single mixed. Pkt. 35c.

Gloxinias

FORGET ME NOT

FORGET-ME-NOT (Myosotis). A favorite old-fashioned flower, bearing in profusion, especially in fall and spring, clusters of dainty blue five-petaled blossoms. It thrives well in the shade or open border, but flourishes best in a moist, shady situation; h. p.
Alpestris. Blue. **Pkt. 5c; oz. 75c.**
Indigo Blue. A new dark indigo color **Pkt. 10c.**
Rosea. Pink-flowering; a pretty contrast for the blue and white varieties **Pkt. 5c.**
White. Pkt. 5c.
Victoria. Large flowers in heads of bright azure blue; plant symmetrical, dwarf and strong grower; good for edgings. **Pkt. 10c.**
Dissitiflora Perfection. Of dwarf compact habit, flowering profusely; looks like a sheet of blue. One of the best Forget-Me-Nots. **Pkt. 15c.**
Perennial Semperflorens. True marsh Forget-Me-Not Dwarf, and in flower from early spring till autumn One foot. **Pkt. 10c.**
Collection of seven kinds, one pkt. of each 45c.

GAILLARDIA. A very showy garden plant, with brilliant flowers in scarlet and yellow, blended and shaded. Blooms freely from early summer till autumn. Grows one and one-half to two feet high, and the blossoms are borne on long, slender stems. Both single and double varieties are hardy.
Fine single mixed, annual. Pkt. 5c.
Double mixed, annual (Picta Lorenziana). Pkt. 5c.
Grandiflora. Single perennial variety of varying shades of reddish brown and yellow. **Pkt. 5c.**

GENTIANA Acaulis. Gentian. Intense blue flowers with yellow spot; four inches high; hardy perennial. **Pkt. 10c.**

GERANIUM. The very well-known Geranium—the one commonly seen is the variety Zonale. Plants of the different varieties are offered in our Nursery Department; h. h. p.
Apple Scented. Very fragrant leaves. **Pkt. 25c.**
Lady Washington or Fancy **Pelargonium.** Handsome large flowered sorts in many colors and with beautiful markings; h. h. p. **Pkt. 25c.**
Zonale. Mixed. Beautiful scarlet shades **Pkt. 10c.**

Gerbera. See Transvaal Daisy.

GEUM, Mrs. Bradshaw. Our splendid novelty of last year. Mrs. Geum has a brilliant scarlet-cardinal flower the size of a large carnation, which it somewhat resembles. You would like this very brilliant flower; h. p. **Pkt. 25c.**

GILIA. A hardy annual growing one foot high, with white, lilac or rose-colored flowers. A native of California. Valuable for rock-work or borders. Sow seed in the fall. **Mixed. Pkt. 5c.**
Achilleaefolia. This pretty gilia is common about San Francisco on the hills and sandy ground. Flowers come in clusters 1½ inches across and often give a blue look to the fields; one foot; hardy annual. **Pkt. 5c.**

Gilliflower. See Ten Weeks' Stocks.

GLAUCUM LUTEUM (Horn Poppy). A showy plant, with long silvery leaves, gracefully curved and deeply cut and curled flowers, bell-shaped, of orange-yellow; perennial. **Pkt. 5c.**

GLOXINIA. Beautiful hot-house plants, with large, bell-shaped blossoms, which come in rich, velvety-deep and bright colors, some of which are beautifully marked. Sow in the fall or early spring. **Grandiflora, mixed, pkt. 25c; Tigered and Spotted, mixed, pkt. 25c.**

GODETIA. A hardy annual, growing from six inches to ten inches high. Of compact growth, with a profusion of satiny cup-shaped flowers, in deep red, pink and white, shaded and blended. Valuable for bedding or massing. Sow seed early in the year. Small flowered deep-red variety; grows wild in California.
Tall Sorts. Fine mixed. **Pkt. 5c.**
Tom Thumb, or Dwarf Varieties. Mixed. **Pkt. 5c.**
Amoena. Deep rose-colored flowers; plants 12 to 30 inches. Our pretty wild flower known as "Farewell to Spring." **Pkt. 5c; oz. 25c; lb. $2.50.**
Duchess of Albany. White. **Pkt. 5c.**
Lady Albemarle. Dark crimson. **Pkt. 5c.**
SCHAMINI; Fl. Pl. This plant is covered with clear light pink blossoms, even in color, with a light crimson center. Flowers are semi-double, with the center showing nicely. Stems are straight and stiff, making a fine cut flower of a most pleasing shade. Godetia Schamini is a flower which should be in every garden. Stems 2 ft. tall; flowers 2½ inches across. **Pkt. 10c.**

GOLDEN-ROD (Solidago Canadensis). Well-known golden-yellow hardy perennial, flowering late in summer Three feet **Pkt. 5c.**

Geum, Mrs. Bradshaw

GOMPHRENA, or GLOBE AMARANTH. A low-growing hardy annual, everlasting, or straw flower, about eight inches high, with globe-shaped flowers, in red or white. The plant makes a good border, and the flowers are very pretty, and are attractive, either while growing or dried. **Mixed, pkt. 5c. White, pkt. 5c. Crimson, pkt. 5c.**

GOURDS. Some varieties, besides being odd, are very ornamental.
Mixed ornamental varieties. Pkt. 5c.
Chinese Bottle. A useful variety. **Pkt. 5c.**
Dish Cloth, or Luffa. The inside lining resembles a sponge; very useful. **Pkt. 5c.**
Dipper, or Siphon. Can readily be made into a dipper. **Pkt. 5c.**
Nest Egg. These resemble a hen's egg and are frequently used for nest eggs **Pkt. 5c.**
Sugar Trough. Useful for baskets or buckets, holding from two to ten gallons each. **Pkt. 5c.**
Turk's Turban. Red, green, striped, etc. **Pkt. 5c.**
Collection one pkt. each of seven kinds for 25c.

ORNAMENTAL GRASSES

Ornamental grasses serve the double purpose of rendering the mixed flower bed or border attractive during the summer, and for the use of spikes or panicles in a dried state in winter bouquets. For large beds or groups on lawns nothing gives a finer effect.

AGROSTIS NEBULOSA. A very graceful and pretty grass—charming for borders; h. a.; 1½ feet. **Pkt. 5c.**

AVENA STERILIS (Animated Oats). Drooping, very graceful. Annual. Two feet. **Pkt. 5c.**

BRIZA MAXIMA (Quaking Grass). Very pretty. Annual. 1½ feet. **Pkt. 5c.**

BRIZA GRACILIS (Small Quaking Grass). Very delicate and graceful. Annual. One foot. **Pkt. 5c.**

BROMUS BRIZAEFORMIS. An elegant Briza-like grass. **Pkt. 5c.**

COIX LACRYMA (Job's Tears). Grows two feet high. **Pkt. 5c.**

ERAGROSTIS ELEGANS (Love Grass). Very graceful and beautiful. Annual. One foot. **Pkt. 5c.**

EULALIA JAPONICA. One of the most beautiful of the tall-growing grasses. Five feet. **Pkt. 10c.**

GYNERIUM ARGENTEUM (Pampas Grass). The finest ornamental grass in cultivation. Half-hardy perennial. 10 feet. **Pkt. 10c.**

STIPA PENNATA (Feather Grass). One of the prettiest and most interesting. Perennial. Two feet. **Pkt. 10c.**

ZEA JAPONICA (Striped Japanese Maize). Pkt. 5c.
Collection of 12 varieties, 50c.

Hunnemannia or Bush Eschscholtzia.

Godetia

GLADIOLUS. Well-known magnificent plants, with sword-like leaves and long spikes of flowers of every conceivable color and shade. Many new and rare varieties are produced from seed. See page 60 for bulbs. **Pkt. 10c.**

GYPSOPHILA (Baby's Breath). The feathery plant with little star-shaped flowers used in making up bouquets. Grows easily in every garden; 2-3 feet; h. a.

Muralis. An excellent border plant; six inches; pink flowers. **Pkt. 5c.**

Paniculata. Fine for bouquets; white flowers; perennial. **Pkt. 5c.**

Elegans. Flowers very largely grown by florists for use in bouquets; white with faint dark lines. **Pkt. 5c; oz. 35c.**

Grandiflora White. This is an improved Elegans with larger flowers and pure white. **Pkt. 5c.**

Pink (Elegans Rosea). A beautiful soft pink; dainty flower. **Pkt. 5c.**

HELENIUM, Autumnale Superbum. A showy perennial, five to six feet tall, producing large, deep-yellow single flowers during summer and fall; fine for cutting. **Pkt. 10c.**

Helianthus. See Sunflower.

HELICHRYSUM (Everlasting Flower). Is the best and most satisfactory of the everlasting flowers, and makes a very handsome dried bouquet; 3-4 feet; h. a. **Monstrosum Mixed. Pkt. 5c.**

HELIOTROPE. A half-hardy perennial, growing four to eight feet high. Small flowers, borne in graceful clusters and very fragrant. Blooms the first season from seed if sown early. Forms a large plant and requires a roomy situation. Can also be grown against a wall and made to assume the character of a climber.
Finest mixed, pkt. 10c.

Hesperis. See Sweet Rocket.

HIBISCUS. Giant Golden Bowl. Very large flowers, six to eight inches, of a deep cream color, with velvety maroon center. Plants grow from three to five feet and are perennial and bear profusely. **Pkt. 10c.**

Crimson Eye. The flowers of this perennial are pure white with a crimson eye; six inches across; plants bloom the first year from seed and often bear 50 or more flowers at once; five feet; summer flowering. **Pkt. 10c.**

HUMULUS, or JAPANESE HOP. A rapid-growing, tender climbing annual with dense leaves. Will grow 20 to 30 feet in a season, and is very valuable for covering a trellis.
Japonicus. Bright-green foliage. **Pkt. 10c.**
Japonicus Variegatus. The leaves are variegated or splashed white and green. **Pkt. 10c.**

HONESTY (Satin Flower; Money Plant). The flat silvery seed pods are used for winter decoration in the house; pretty and different from anything else; two feet; h. b. **Pkt. 5o.**

HOLLYHOCK. A hardy perennial of upright, stately growth, five to eight feet high. The very double varieties are the most desirable, but the newer, semi-double fringed types are also very popular. Hollyhocks make a fine row in a garden, or a fine back-ground next to a building or high wall or fence.

DOUBLE VARIETIES. **Mixed, pkt. 10c; oz. $1.50.**
Black, pkt. 10c. Blood Red, pkt. 10c.
Canary Yellow, pkt. 10c. Rose Pink, pkt. 10c.

SINGLE VARIETIES. **Mixed.** The old fashioned blossoms in all colors. **Pkt. 5c.**

Allegheny. Mixed. The semi-double, fringed variety. An artistic and pretty sort. **Pkt. 10c.**

HUNNEMANNIA, or BUSH ESCHSCHOLTZIA. Known also as the Santa Barbara Poppy. An erect-growing, tender perennial, about two feet high. Foliage fine-cut and feathery. Blossoms beautifully cup-shaped, bright yellow, and about three to four inches across; stems long and smooth. The plant is in bloom during the whole summer.
Fumariafolia. Pkt. 5c.

Hyacinth Bean. See Dolichos.

ICE PLANT (Mesembryanthemum Crystallinum). A low growing and trailing tender perennial. The thick leaves seem to be covered with crystals. Used for edging embankments and box work; thrives in bright sunlight and in dry situations. Flowers, cerise purple and small, completely covering plant. **Pkt. 10c.**

IMPATIENS SULTANI (Zanzibar Balsam). Much prized for window culture. The foliage is waxy green, and with the semi-transparent branches makes a plant in itself attractive. The bright rosy carmine flowers are very delicate and pretty. **Pkt. 15c.**

Incarvillea Delavayi

INCARVILLEA DELAVAYI

This is a flower which resembles a gloxinia, and indeed is often called "the hardy gloxinia." Flowers are old rose colored, borne on spikes 18 in. tall. The leaves are much cut and are decorative in themselves. **Pkt. 10c.**

IPOMOEA

IPOMOEA. Beautiful annual outdoor climber of luxuriant growth for covering verandas and arbors, or for screening unsightly objects. Sow preferably in heat and transplant to open border, or sow in open border after the ground becomes warm. The seed of several varieties, especially the moon flower, should have the outer shell punctured and then soaked in water for 12 hours or more to hasten germination.10-15 ft.; t.a.

Bona Nox (Evening Glory, or Good Night). Large fragrant violet blossoms, expanding in the night. **Pkt. 5c; oz. 25c.**

Coccinea, or Star Ipomoea. Small scarlet blossoms; vines about 10 feet. **Pkt. 5c.**

Grandiflora Alba (Moon Flower). Large white blossoms, five to six inches across, which expand at night. The vine grows very rapidly, as much as 50 feet in a season, and is covered at night and in the early morning with a multitude of fragrant white flowers; leaves large. **Pkt. 15c.**

Sky Blue Moon Flower. Of strong, vigorous growth, the plants quickly attain a height of 12 to 15 feet. Large leaves and large beautiful flowers, four inches across, of the softest cerulean blue, shading to white at the edge. **Pkt. 10c.**

Heavenly Blue. A tall climber with large, light blue flowers, yellow throated and measuring 4 to 5 inches across. **Pkt. 10c.**

IPOMOEA—Con't.

Learii. Large dark blue flowers, on a perennial vine. **Pkt. 25c.**

Lutea. Small yellow blossoms; vine of medium size. **Pkt. 10o.**

Setosa, or Brazilian Morning Glory. The vine has large overlapping leaves, eight to ten inches across, which make a dense shade; useful for covering porches or garden fences; annual. Flowers delicate light-reddish purple, with pink star in the center. Flowers come in clusters. **Pkt. 10c.**

Collection of the 8 varieties for 60c.

Imperial Japanese. See list under Morning Glory..

Ipomoea Quamoclit. See Cypress Vine.

Japanese Hop. See Humulus Japonicus.

KAULFUSSIA, AMELLOIDES. The whole effect of this plant is a medium sized intense blue daisy; fine for bedding; is clear, even light blue in color; 10 in. high, 1¼ in. across; annual. **Pkt. 10c.**

KENILWORTH IVY. A hardy perennial trailing plant, especially adapted for hanging baskets, window boxes or for trailing over walls. **Pkt. 10c.**

KOCHIA TRICOPHYLLA (Summer Cypress). A splendid ornamental annual plant, forming dense oval bushes, 2 to 2½ feet high, of small, feathery, light-green foliage. As summer advances this changes to a carmine hue and finally to a fiery red. A very attractive plant at all times. Also called "Burning Bush." **Pkt. 10o.**

KUDZU VINE (Pueraria Thunbergiana). Called also Jack-and-the Bean Stalk; h. p. "It beats the Dutch" how fast and far this vine can climb. The first year it will do 10 feet, and the next up to 50. Fine for a permanent vine. **Pkt. 15c.**

LANTANA. A tender perennial, often becoming shrub-like, two to three feet high, bearing verbena-like clusters of flowers, in orange, rose and other colors. Blooms constantly all summer. **Fine mixed, pkt. 10c.**

LARKSPUR

OR DELPHINIUM

There are two classes of the Larkspur which are quite distinct—the annual and the perennial. Both are well known and are among the finest flowers.

HARDY ANNUAL VARIETIES. These Larkspurs grow about one and one-half to two feet high. A great variety of bright colors; of easiest culture, doing well in any soil.

Azure Fairy. Like Blue Butterfly, only the finest shade of azure blue. **Pkt. 25c.**

Blue Butterfly. A very charming Salvia blue Larkspur with single flowers carried abundantly well out from the plant; 15 to 18 inches high. Quite new and very fine. **Pkt. 10c.**

Dwarf Rocket. Mixed. Dwarf plant, 12 inches for bedding; double flowers. **Pkt. 5o; oz. 30c.**

Emperor. Branching. The Emperor Larkspurs are very bright and showy and send up often 40 or more erect spikes of double flowers; two feet.
Rose. Pkt. 10c.
White, pkt. 5c. Mixed, fine double flowers, **pkt. 5c.**

HARDY PERENNIAL LARKSPURS (Delphiniums). These are taller than the annual sorts and their brilliant flower spikes arrest your attention even at a distance. The foliage is attractive and the plants strong and neat in habit. By keeping the plants well watered and the flowers cut, a second crop of bloom may be had, and from some a third. The seed is a little difficult to start, so we advise sowing in a box in prepared soil and under a glass.

Cardinale. This is the grand "Southern Scarlet Larkspur," one of the brightest and finest of California wild flowers, and which makes the Southern mountainsides a blaze of glory in mid-June; three to five feet. **Pkt. 20c.**

Chinese Mixed. Large single flowers on spikes; two to three feet, the flowers have all the delicate shades of blue, from white to deep indigo; flowers early from seed sown in the spring. **Pkt. 10c.**

Elatum Hybridum. Blue, of various shades, with black center; very handsome; three to five feet. **Pkt. 10c.**

Formosum. The variety most often seen. Bright blue flowers with white center. Tall spikes, three feet. **Pkt. 10c.**

Morse's Giant Hybrids. A very fine strain of large flowered Larkspurs, with a range of colors from light to dark and in colors from a pale lavender to a deep violet. **Pkt. 15c.**

LATHYRUS LATIFOLIUS (Perennial, or Everlasting Pea). A hardy perennial climber, flowering the first year if seed is sown in the fall. Leaves and stems smooth. Flowers resemble sweet peas, but are borne on strong stems, with eight to ten blossoms to the stem. Is not fragrant, but is hardy and showy, and thrives in any good soil.

Pink Beauty. The ground of the petals is white, edged and shaded with pink. **Pkt. 5c.**

Crimson, pkt. 5c. Mixed, pkt. 5c.

White. The best variety for cutting, especially for florists' use. **Pkt. 10c.**

LAVATERA (Tree Mallow). A showy hedge plant, growing about six feet high and covered with shrimp-pink, cup-shaped flowers. Much used for windbreaks about San Francisco. Sow in May in the open ground and thin young plants to 12 inches apart. **Arborea. Pkt. 5c.**

Rose Splendens. A bright pink h. h. annual, with large single flowers. A great favorite in England. **Pkt. 15c.**

White Splendens. Annual, as above. **Pkt. 15c.**

LAVENDER. Chiefly cultivated for the delicious and lasting fragrance of its flowers; succeeds in any common garden soil. Perennial. **Pkt. 5c.**

LEMON VERBENA. The leaves of this fine old favorite are delightfully fragrant and refreshing. Grown easily from seed; h. p. **Pkt. 10c.**

LEPTOSIPHON French Hybrids. Canary, terra cotta and white. Clusters of small flowers ⅝ inch across; leaves linear; each flower has a sharply marked eye in a deeper yellow maroon color. These flowers are on dwarf plants 8 to 10 inches high. Very bright for a border, for massing or for rock work; h. a. **Pkt. 10c.**

LEPTOSYNE MARITIMA (Sea Dahlia). Along the seashore of Southern California grows this very bright yellow wild flower. The plant is about two feet high and has succulent divided foliage. Flowers three to four inches across; annual. **Pkt. 5c.**

LINARIA Excelsior; Hybrida. Flowers are on open heads on long upright stems; this makes the flowers show up well and makes a fine bed. The colors are mostly violet and light purple. The flowers have each a white lip with a yellow blotch, which makes the whole bed have a light tone and makes it very pretty. Flowers are wide open, ¾ inch across, 18 inches high. Our bed of Linaria was greatly admired. **Pkt. 10c.**

Reticulata. One of the most showy of annuals. The flowers are small on good spikes and are of great contrast in color, being bright yellow and purple. Linarias are good for cutting. **Pkt. 10c.**

LINUM, or FLOWERING FLAX. A hardy annual, about one and one-half feet high. Of slender and graceful appearance, with smooth stems and bright-red flowers, which are borne in great profusion. Can be sown early out of doors and thrives well in good soil.

Rubrum (Scarlet Flax). Pkt. 5c.

Perennial Flax. Blue. **Pkt. 5c.**

LOBELIA

A hardy annual and hardy perennial. The annual grows four to six inches high, is of compact growth and literally covered with small bright flowers. By cutting back the plants during the summer and giving plenty of water, they may be kept in flower all summer. Used for ribbon work and borders or hanging baskets.

CELESTIAL (Compacta). The finest intense blue for edging; flowers are large and wide opened, ⅞ inch across, having just the slightest eye. Flowers are borne well on the top of the plant, completely covering it with a mass of intensest blue. Is earlier than Crystal Palace Compacta, larger flower, smaller eye, more vivid and slightly lighter blue. Celestial Lobelia caused great attention when shown at the P. P. I. E. We recommend this new and greatly improved sort. **Pkt. 15c.**

Crystal Palace Compacta. Deep blue flowers and dark foliage; six inches; a constant bloomer. Fine for dark blue borders. **Pkt. 10c; ⅛ oz. 50c.**

Emperor William. A fine bright blue; excellent for blue borders; foliage light green; plant compact. **Pkt. 10c; ⅛ oz. 40c.**

Golden Queen. Dwarf; blue flowers, yellow leaves. **Pkt. 10c.**

Gracilis. Light blue, trailing, light green foliage. Excellent for hanging baskets. **Pkt. 5c.**

Prima Donna. Maroon, with white eyes; trailing. **Pkt. 10c.**

Snowball (Compacta). A very large flowering pure white Lobelia for edgings. A white companion to Celestial. **Pkt. 15c.**

Speciosa. Deep blue flowers and dark foliage; trailing. **Pkt. 10c.**

White Gem (Compacta). Snow-white flowers cover the plant. **Pkt. 10c.**

Mixed Compact Varieties. Pkt. 5c.

Perennial Lobelias are hardy and three feet high. The blossoms are produced in tall showy spikes.

Cardinalis, or Cardinal Flower. Brilliant scarlet flower spike. Worthy of a more extensive cultivation. This plant loves a wet, boggy place, so water extra. **Pkt. 10c.**

Hybrids, mixed. Large flowers, resembling Cardinalis. In all shades of rose, red, lilac, purple, etc. In flower all summer and fall. **Pkt. 25c.**

LOPHOSPERMUM SCANDENS. Tender climbing perennial, growing 10 to 12 feet long, with showy purplish-rose blossoms, something like Foxgloves. **Pkt. 10c.**

Love-in-a-Mist. See Nigella.

Love Lies Bleeding. See Amaranthus Caudatus.

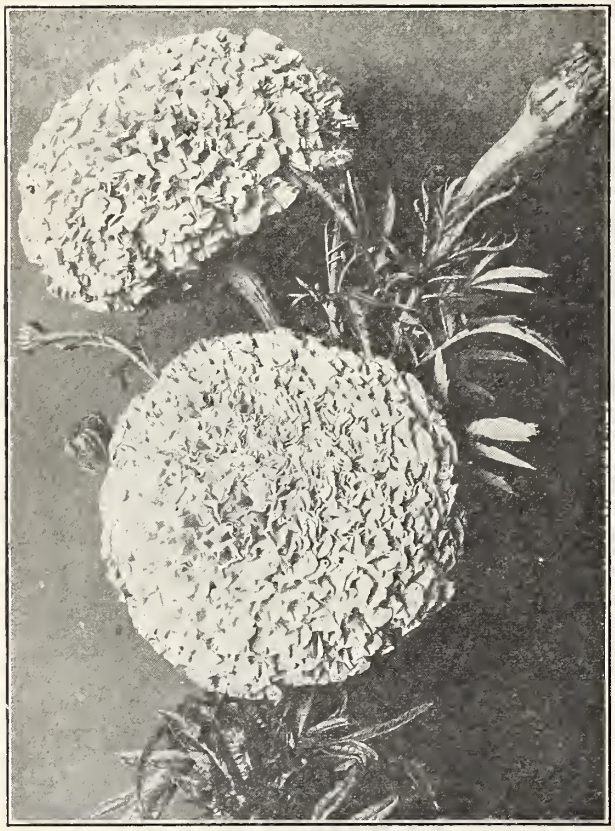
Marigold—Morse's Selected Striped

LUPINUS, OR LUPINS

Hardy native California annuals, in great variety, growing from one to three feet high, and bearing spikes of pea-shaped flowers. Hartwegii Lupins are much improved, large flowering annuals. These come into flower early and bear fine spikes 2 feet tall. Of the easiest culture. Sow in the open ground and thin to six inches apart.

Cruikshankii. Dark blue. Long racemes of beautiful blue flowers. **Pkt. 5c.**
Hartwegii Albus. Pure white; fine. **Pkt. 5c.**
Hartwegii Albo Coccineus. Crimson tipped white, the whole effect being pink. **Pkt. 10c.**
Hartwegii Atroviolaceus. Dark violet. **Pkt. 5c.**
Hartwegii Blue. Clear deep blue. **Pkt. 5c.**
Hartwegii Coelestinus. Fine azure or very light blue of even color. Thoroughly charming. **Pkt. 10c.**
Hartwegii Roseus. Pink. **Pkt. 10c.**
Hartwegii Superbus. Rosy purple and white. **Pkt. 10c.**
Pink (Hybridus Roseus). Long spikes of bright pink flowers. **Pkt. 10c.**
Polyphyllus. Tall, handsome flowers, perennial lupins with long flower spikes; hardy. **Mixed. Pkt. 5c.**
Mixture of all colors, pkt. 5c.

LYCHNIS. Hardy perennial, growing about 3 feet high, and bearing bright-colored flowers in clusters. Of easy culture.
Chalcedonica. Scarlet flowers. **Pkt. 5c.**
Haageana. Orange, crimson and scarlet. **Pkt. 5c.**



Marigold—Morse's Lemon King

MARIGOLD. A hardy annual, shrubby plant in dwarf and tall varieties, growing from six inches to three feet high. Foliage bright green, deeply cut and graceful. The flowers are various shades of yellow and brown.
Eldorado. Called **"The African Marigold."** The best tall variety, with large, very double blossoms. **Mixed, pkt. 5c; oz. 40c.**
Morse's Lemon King, African type. Perfectly superb, light yellow flowers 4½ to 5 inches across; very double and finely finished. **This is very much admired. Pkt. 15c.**

DWARF FRENCH MARIGOLDS

Golden Ball. Extra dwarf, is very double; 15 inches tall. A new compact bright yellow Marigold. **Pkt. 15c.**
Gold Edged. The flowers are maroon outlined with yellow. Pretty and unusual. Like Golden Ball, is good for bedding; double. **Pkt. 10c.**

Mimulus, Queen's Prize

MARIGOLD—Continued.
Pigmy Spotted. The petals of these double flowers are yellow with maroon center on each petal. The same height as Golden Ball and Gold Edged. **Pkt. 10c.**
Dwarf French, Legion of Honor. Single brown and yellow. **Pkt. 5c.**
Dwarf French, striped. Pkt. 5c.
Dwarf French, Mixed. Small flowers. **Pkt. 5c; oz. 50c.**
Tall French Mixture. A mixture of tall double; colors in yellow, brown and stripes. Small flowered. **Mixed, pkt. 5c.**
Morse's Selected Striped. Tall French type, 2-6 to 3 feet high and just loaded all the season with most striking flowers 2 inches across. Each petal is clear yellow with a brown band on each side of it. This Marigold should be everywhere. **Pkt. 15c.**
Pot Marigold and Cape Marigold. See Calendula.

Marvel of Peru. See Four O'Clock.

MANDEVILLA SUAVEOLENS (Chili Jasmine). Fine summer climber, with great clusters of large, waxy, star-shaped blossoms, exquisitely fragrant, resembling the single tuberose in shape. **Pkt. 15c.**

MATRICARIA (Double White Feverfew). Bushy perennial garden plant, bearing quantities of white double button-like flowers; useful for cutting. **Pkt. 5c.**

Matthiola Bicornis. Evening-Scented Stock. The flowers are exceedingly fragrant during the evening, scenting the surrounding atmosphere. Purple flowers. Not the handsome Ten Weeks' stock, which see. Hardy annual. **Pkt. 5c.**

MAURANDIA (Giant-Flowering). Beautiful climber for either garden or greenhouse decoration and for hanging baskets; gemmed with Gloxinia-shaped flowers of rich purple, white and rose; t.p. Mixed colors. **Pkt. 10c.**

MICHAELMAS DAISY. See Aster. New England perennial.

MIMULUS. A half-hardy perennial, growing from six inches to one foot high. Blooms freely and exists in a large variety of colors. Useful for window gardens and pot work, or for garden in a moist, shady situation. Blooms first year from seed if sown early.
Moschatus, or Musk Plant. Fragrant plant, with small, yellow blooms, spotted lightly with brown. **Pkt. 5c.**
Tigrinus, or Monkey Flower. Large flowers of several colors and spotted. **Pkt. 10c.**
Queen's Prize. A remarkably fine selection of M. Tigrinus. **The flowers are large and most brightly colored and spotted; the colors are yellow, orange, scoppery red and pink. Perennial, 12 inches high and does well, preferring cool location. Pkt. 15c.**
Cardinalis. Scarlet flowered perennial, 18 inches high; useful for a border; free flowering. **Pkt. 10c.**

MINA LOBATA. A fine annual climber which grows very rapidly to a height of 20 or 30 feet in a season. Mina is one of our best climbers, the leaves are of good size and dense, and the flowers are freely borne in clusters, orange red. Useful for arbor, trellis, etc.
Pkt. of 20 seeds, 10c.

MIGNONETTE

A well-known favorite in all old-fashioned gardens. Cultivated for its fragrant flowers, which come thickly. Set on compact spikes. May be sown at any time of year about San Francisco. In other places sow in early spring. 1 ft. h. h. a.

Mignonette—Very Fragrant

Allen's Defiance. Long spikes of whitish flowers and compact growth. **Pkt. 10c.**

Golden Machet. A compact-growing variety, with medium long, thick spikes of yellow flowers. **Pkt. 5c; oz. 50c.**

Pure Machet. A compact-growing variety, with thick spikes and large size flowerets. **Pkt. 5c; oz. 50c.**

Sweet Scented (Reseda Odorata). Pkt. 5c; oz. 25c.

Mixture of the best compact varieties, pkt. 5c; oz. 25c.

MOMORDICA. Balsamina, or Balsam Apple. A climbing annual, growing about 10 feet long. Has graceful and ornamental foliage, yellow flowers and warted golden-yellow fruit, with large carmine-red seeds. Balsam Apple and Balsam Pear are climbers which thrive in hot locations and are much planted around Bakersfield. **Pkt. 5c.**

Charantia, or Balsam Pear. Same as the Balsam Apple, but fruit is pear-shaped and foliage larger. **Pkt. 5c.**

Moonflower. See Ipomoea Grandiflora Alba.

MORNING GLORY (Convolvulus Major. See also **Ipomoea).** No climber is more popular than is the Morning Glory; for covering trellises or unsightly back fences they and climbing Nasturtiums are most often planted. Morning Glories grow quickly to a vine 15 feet long and bear very abundantly brilliant flowers, funnel-shaped, of various colors, blue predominating. Soak the seed for two hours in warm water to hasten germination; of easy culture. See Ipomoeas for Brazilian Morning Glory and for sorts not listed here.

Tall, or Climbing Varieties. Mixed. **Pkt. 5c; oz. 15c.**

Imperial Japanese. These are much the handsomest flowers in Morning Glories, of gigantic size and in colors ranging from snow white to carmine, through every shade of blue and purple to nearly black; also marbled, striped and splashed sorts. The vine is not quite so vigorous a climber as the above. **Pkt. 5c; oz. 20c.**

Dwarf, or Bush Varieties (Convolvulus Minor). Plants grow 10 to 12 inches high and are hardy annuals. Useful for beds, edges or hanging baskets. Mixed. **Pkt. 5c.**

Mourning Bride. See Scabiosa.

Musk Plant. See Mimulus Moschatus.

Myosotis. See Forget-Me-Nots.

NEMESIA. Large flowering; a delicate and dainty annual, about one foot high, wonderfully bright and even bedding plant; a mass of flowers.

Triumph Mixed. This has flowers in light blue, red, yellow and terra cotta. Compact form. **Pkt. 15c.**

Blue Gem. Compacta. Clear forget-me-not blue of the most pleasing color in fine compact heads; 12 inches high. This is a beautiful bright-blue flower which you must have admired if you saw our flower beds at the Exposition. A novelty. **Pkt. 20c.**

NEMOPHILA, or LOVE GRASS. A hardy annual California wild flower, growing about six inches high. Has small cup-shaped blossoms about one inch in diameter, in white and shades of blue. **Mixed, pkt. 5c.**

Insignis (Baby Blue Eyes). Sky blue with white eyes. **Pkt. 5c; oz. 20c.**

Maculata. White, with each petal spotted violet at tip. **Pkt. 5c; oz. 20c.**

NICOTIANA, or FLOWERING TOBACCO. A half-hardy annual, growing three feet high, with slender tubular flower. Belongs to the tobacco family. Requires plenty of room in the garden.

Affinis. White and very fragrant. Flowers open in evening and cloudy days. **Pkt. 5c.**

Affinis Hybrids. Splendid new hybrids of the popular N. Affinis; they possess the delicious fragrance of the parent; colors blue, red, rose, white, etc. **Pkt. 15c.**

Colossea. Giant foliage plant of a dark glossy green with reddish ribs. **Pkt. 10c.**

Sanderaea. Various bright colored blossoms are freely borne on this plant, which opens during the day. **Pkt. 10c.**

NIGELLA, or LOVE-IN-A-MIST. A hardy annual, one foot high, with finely cut foliage. Oddly shaped blossoms in blue and white, and curious seed pods. Of easy culture.

Damascena. Pkt. 5c.

OENOTHERA, or EVENING PRIMROSE. A half-hardy annual and perennial, about six inches high, bearing bright, showy flowers in white, pale yellow, rose, etc. Of the easiest culture. The blossom is fully expanded only late in the afternoon.

Annual Varieties. Mixed. **Pkt. 5c.**

Yellow (Lamarckiana). A bright yellow evening primrose, three feet high; perennial; of great beauty. The yellow evening primrose is found wild in many parts of California. **Pkt. 5c.**

California. Our new red-budded variety, introduced this year for the first time. This primrose was discovered and developed by Prof. R. R. Gates. See his full description on page 64. **Pkt. 10c.**

Nemesia, Triumph

NASTURTIUMS

Tender annual, in two distinct classes—Dwarf, and Tall or Climbing

The foliage of nasturtiums is pretty and the flowers very beautiful and contained in a great number of brightest colors and tints. Sow the seed where it is to remain late in the spring and after danger of frost is over. It is seldom necessary to thin the young plants, as they will bear standing close together.

Nasturtiums prefer dry, rather rocky soil, such as we usually call "poor" soil, and bear their flowers in such locations in greater profusion than in a rich garden where they run too much to leaves. This adds to their value for planting over many unsightly places.

Crystal Palace Gem Dwarf Nasturtiums

TALL OR CLIMBING VARIETIES

Of quick growth, covering a wall, hedge, or trellis in a short time. The brilliant blossoms almost cover the plant from top to bottom.

Butterfly. Light yellow, with blotch of deep red on lower petal. **Pkt. 5c; oz. 20c; ¼ lb. 60c.**

Caprice. A mixture of bright colors, spotted and shaded, with dark foliage. **Pkt. 5c; oz. 15c; ¼ lb. 45c.**

Chameleon. A mixture of changing and inconstant shades. **Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. $1.20.**

Dark Crimson. Pkt. 5c; oz. 10c; ¼ lb. 30c.

Jupiter. Large, bright, golden yellow. **Pkt. 5c; oz. 20c; ¼ lb. 60c.**

Midnight. Flowers deep brownish red; foliage deep green. **Pkt. 5c; oz. 20c; ¼ lb. 60c.**

Moonlight. Immense creamy-yellow flowers. **Pkt. 5c; oz. 15c; ¼ lb. 40c.**

Orange. Pkt. 5c; oz. 15c; ¼ lb. 40c.

Pearl, or White. Light lemon or primrose. **Pkt. 5c.**

Rose. Pkt. 5c; oz. 15c; ¼ lb. 40c.

Scarlet. Pkt. 5c; oz. 15c; ¼ lb. 40c.

Sunlight. Bright yellow. **Pkt. 5c; oz. 15c; ¼ lb. 40c.**

Twilight. Large blossoms of light salmon, suffused with rosy salmon. **Pkt. 5c; oz. 15c; ¼ lb. 40c.**

Yellow. Pkt. 5c; oz. 15c; ¼ lb. 40c.

Tall Varieties Mixed. All the above varieties, besides many others, in a splendid mixture. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 70o.**

Ivy-leaved. A mixture of several colors; have lobed or scalloped leaves. The blossoms have scalloped edges. Very pretty and attractive. **Pkt. 5c; oz. 25c; ¼ lb. 75c.**

LOBB'S CLIMBING NASTURTIUMS

(TROPAEOLUM LOBBIANUM)

A tall or climbing class. The leaves are smaller and the flowers more numerous and prolific than the ordinary tall class.

These are very similar to the ordinary climbing nasturtiums, the chief difference being in the bright shades and darker leaves of some. The flowers are slightly smaller, but are borne more freely.

Lobb's Varieties Mixed. Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.

Asa Gray. Light lemon or primrose. **Pkt. 5c; oz. 15c.**

Crown Prince of Prussia. Blood red. **Pkt. 5c; oz. 15c.**

Crystal Palace. Orange-scarlet. **Pkt. 5c; oz. 15c; ¼ lb. 45c.**

Giant of Battles. Sulphur-yellow, blotched with red. **Pkt. 5c; oz. 15c; ¼ lb. 45c.**

King of the Blacks. Dark-red flowers and dark foliage. **Pkt. 5c; oz. 15c; ¼ lb. 45c.**

Lucifer. Blossoms deep crimson; leaves brownish green. **Pkt. 5c; oz. 15c; ¼ lb. 45c.**

Regina. Salmon-red, changing to almost cream color. **Pkt. 5c; oz. 15c; ¼ lb. 45c.**

Spitfire. Brilliant scarlet. **Pkt. 5c; oz. 15c; ¼ lb. 45c.**

Hybrids of Madam Gunter. Mixed. A splendid mixture of blotched, shaded and variously marked petals, in bright, glowing tints. **Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. $1.00.**

VARIEGATED QUEEN, OR TALL VARIEGATED LEAVED MIXED

Every leaf is variegated with yellow, white and green. Some of the leaves are one-half to two-thirds white and yellow, while others are mostly green, but beautifully striped and blotched. This gives a new and very handsome appearance to the plant.

The flowers are of all colors. **It comes entirely true from seed. Pkt. 10c; oz. 35c.**

DWARF NASTURTIUMS

The plants form a small, round bush 12 to 16 inches high, which is a mass of bloom all summer. Do not water too much nor sow on rich ground for abundance of bloom.

Aurora. Yellow, veined carmine. **Pkt. 5c; oz. 10c; ¼ lb. 30c.**

Chameleon. Mixed. A dwarf mixture of blotched and inconstant shades on one plant, such as bronze and crimson or yellow. **Pkt. 5c; oz. 20c; ¼ lb. 60c.**

Crimson. Pkt. 5c; oz. 15c; ¼ lb. 45c.

Crystal Palace Gem. Sulphur-yellow, spotted with carmine. **Pkt. 5c; oz. 10c; ¼ lb. 30c.**

Empress of India. Intense scarlet, with foliage dark brown and green. **Pkt. 5c; oz. 15c; ¼ lb. 45c.**

Golden King. Rich golden yellow. **Pkt. 5c; oz. 15c; ¼ lb. 45c.**

"Golden Midnight." The foliage is a light yellowish-green, while the flowers are of such a dark maroon as to seem almost black. The artistic effect rendered by this contrast between leaves and blossoms is unique and at the same time beautiful. **Pkt. 15c.**

King of Tom Thumbs. Dark scarlet and dark-green leaves. **Pkt. 5c; oz. 10c; ¼ lb. 30c.**

King Theodore. Very deep crimson and dark foliage. The darkest of all, nearly black. **Pkt. 5c; oz. 15c; ¼ lb. 45c.**

Rose or Pink. Pkt. 5c; oz. 10c; ¼ lb. 30c.

Rosy Morn. This beautiful new variety of Nasturtium is a remarkably bright light cherry scarlet. The plant is compact with an abundance of flowers which are borne well above the leaves. Rosy Morn is a distinct and showy color. **Pkt. 25c.**

Ruby King. Bright red, tinted salmon. **Pkt. 5c; oz. 10c.**

Queen of Tom Thumbs. Silver variegated foliage, crimson flowers; dwarf and compact, and a handsome bedding plant. **Pkt. 10c.**

Queen of Tom Thumbs Rosy Scarlet. Bright green foliage variegated with creamy white. This makes the plant attractive both before and after flowering. Bright rosy scarlet flowers. **Pkt. 10c.**

Scarlet. Pkt. 5c; oz. 10c; ¼ lb. 30c.

White Pearl. Very light lemon or primrose. **Pkt. 5c; oz. 10c; ¼ lb. 30c.**

Yellow. Pkt. 5c; oz. 10c; ¼ lb. 30c.

Dwarf Varieties Mixed. A splendid mixture of all the above, besides many other varieties. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 85c.**

MORSE'S SUPERB PANSIES

All our Pansy seed is obtained from the most noted European specialists. Pansies thrive best in a moist, shady location and in rich, loamy soil. *Seed should be sown in the autumn* for early spring blossoms, or can be sown early in the year for good flowers late in the spring. The plants must be transplanted twice in order to get the largest flowers; once from the seed box to a chosen bed, and again to the open garden. This is important for large-size pansies; use manure liberally. The blossoms are usually larger in the spring and again in the fall, and while they bloom freely all summer, the blossoms are small during the hot months. While the plants carry over well with a little covering during the winter, it is best to plant new seed each year.

SEPARATE COLORS OR BEDDING VARIETIES

	Pkt.	Oz.
Atropurpurea: dark maroon	$ .10	$1.25
Azure Blue: light blue shaded darker	.10	1.50
Bronze: deep mahogany	.10	1.50
Cardinal: the nearest approach to a bright red	.10	...
Couquette de Poissy: distinct mauve, shading to white on the petals	.10	...
Emperor William: ultramarine blue	.10	2.00
Fairy Queen: blue with azure margin	.10	1.50
Fire King: yellow with maroon face	10	2.00
Golden Gem: pure yellow	.10	2.00
Gold Margined: yellow with face, gold edges at top of petals	.10	1.75
King of the Blacks or Faust: black	$ .10	$1.75
Lord Beaconsfield: deep violet blue on lower petals, shading to azure on the upper petals	.10	1.75
Prince Bismarck: golden bronze or fawn color	.10	1.75
Silver Edged: maroon black, silver edged	.10	1.50
Victoria: carmine red	.10	2.00
Violet: fine clear blue	.10	1.50
White or Snow Queen: pure white	.10	2.00
White, with Black Center	.10	1.75
Yellow, with Black Center	.10	1.75
Large Flowering Varieties: all mixed	.10	1.25
Striped or Mottled Mixed	.10	1.75

Twelve packages of any of the above 10c varieties for **$1.00**; six for **50c.**

SOME OF THE SORTS TO BE FOUND IN OUR PRIZE STRAIN MIXTURE ARE OFFERED SEPARATELY BELOW, TRULY GIANT IN SIZE:

Giant Adonis: light blue with dark blue face.

Giant Bridesmaid: wine-color shaded.

Giant Emperor William: fine dark blue.

Giant Faust: large, pure black.

Giant Hortense Red: old rose color.

Giant Indigo Blue: a deep indigo color with face.

Giant Lord Beaconsfield: three lower petals purple, upper two lavender.

Giant Madam Perret: wine color and white, fine red.

Giant Prince Henry: clear purple, a fine rich shade.

Giant Pure White: fine large size.

Giant White Three Spotted: three large purple spots. Trimardeau type.

Giant Pure Yellow: the largest size of this color.

Giant Yellow Five Spotted: very large. Cassiers type.

Giant Yellow Three Spotted: Trimardeau type of yellow faced pansies. **Pkt. 20c.**

All of the above Morse's Giant Pansies, per pkt. 20 cents, or five pkts. your selection for 85c.

Collection of the 14 Giant Pansies above, one of each sort, for **$2.10.**

Giant Masterpiece. These new pansies have a most beautiful combination of rich velvety coloring and attractive wavy or ruffled petals. This wavy effect gives a graceful appearance rarely seen in pansies, and while they are really very large, they appear larger on this account. **Pkt. 20c.**

Giant Odier, or Prize Blotched, Mixed. A large flowered type with round blossoms. The petals are all blotched at the base and distinctively margined on the edge. **Pkt. 25c.**

Orchid, or Cattleya Flowered, Mixed. A mixture of delicate shades and pleasing light tones of yellow, lavender, red and mauve. Entirely new tones. **Pkt. 20c.**

Giant Parisian, Large Stained. A strain of large flowering light color Trimardeau Pansies, with many faced Pansies—a most attractive strain. **Pkt. 15c.**

Giant Trimardeau, Mixed. The large flowering type of pansies, called the French strain. The top petals are larger than the three lower ones and are beautifully marked **Pkt. 15c; oz. $2.00.**

MORSE'S PRIZE STRAIN. This is a mixture of all the giant flowered varieties, including both plain color sorts, faced sorts and the new giant ruffled edge and rare varieties. The seed is saved from Germany's most famous pansy garden from **Exhibition Flowers**, and numbers of gold medals have been won in competition by seed which we use in making Prize Strain Mixture. We were fortunate in getting this seed in spite of the war. Grow this seed with care, following directions, and you will have the most gorgeous giant pansies imaginable. Our friends tell us these are the finest pansies they have ever seen.

Price per Packet (about 500 seeds) **50 cents.**

Morse's Special English Exhibition. This seed is from one of the finest prize collections in Great Britain and is especially saved from prize plants. Fanciers of English Pansies will be delighted with these. **Pkt. 50c.**

Bugnot Mixed. A circular, ruffled, and five-petaled type, with soft, blended colors and tints, veined on the margins and with a large dark blotch in the center of each petal. One of the finest varieties. **Pkt. 25c.**

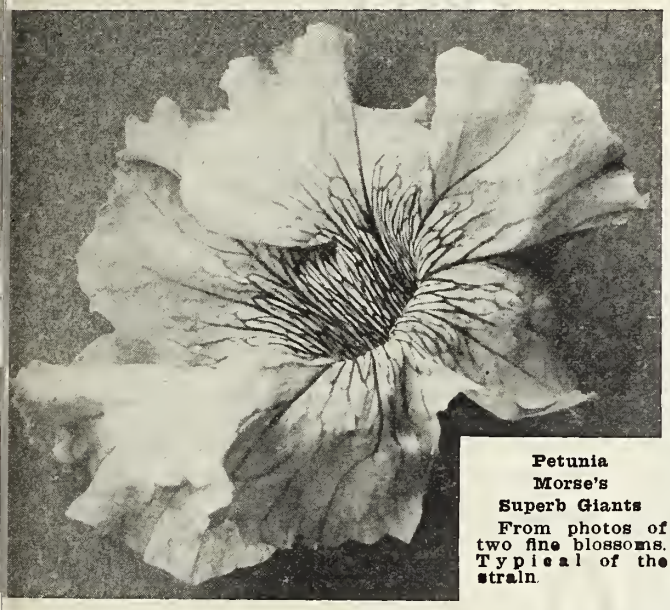
Cassier's Giant, Mixed. A splendid mixture of various shades and markings. The blossoms are perfectly round and are blotched at the base of three to five of the petals. The blotches are smaller than in the Bugnot type. **Pkt. 25c.**

Morse's Imperial German Strains, Mixed. A superfine mixture of the choicest German varieties in all colors. This is a fine mixture of Giant Pansies and with many sorts. **Pkt. 25c.**

MORSE'S GIANT PETUNIAS

Petunias grow with little attention or care and in any soil, and bloom profusely all spring and summer. The large, double varieties do not produce seed, but the pollen from them is artificially crossed on the large, single and fringed plants, and the seed so produced will make a percentage of double blossoms. The Giant Flowered types are in large, single, plain edged or fringed edged blossoms, or in very thickly double flowers. As Petunia seed is exceedingly fine, merely press it into the soil after sowing, cover with chopped moss or sift a little sand over to cover, and, if possible, allow the water to soak up from beneath The weakest-looking plants will develop into the handsomest flowers, so save all plants carefully.

Petunia Seed is very fine and very expensive; there is therefore but a very little seed, almost like dust, in each packet.



Petunia Morse's Superb Giants
From photos of two fine blossoms. Typical of the strain.

Giant Flowered Varieties, all fertilized by hand:

Single, Plain Edge, Mixed. Deep throated, brilliantly blotched. **Pkt. 25c.**

Single, Fringed, Mixed. Deep throated, brilliantly blotched. **Pkt. 25c.**

Morse's Superb Giants. Very strong, vigorous plants with enormous flowers in a great variety of colors, some blotched, some veined and in pretty light shades. If you appreciate fine giant petunias, try these. **Pkt. 50c.**

Double, Plain Edged, Mixed. White, blotched and brilliantly colored. **Pkt. 25c.**

Giant Flowered Varieties—Continued.

Double, Fringed, Mixed. Striped, blotched. **Pkt. 25c.**

Small Flowered Varieties, for bedding:

Rosy Morn. This is a very pretty petunia with a great number of flowers which are a bright rosy pink with white throat. The plants are small and compact and flower most freely. **Pkt. 15c.**

Dwarf Inimitable. Mixed. A very free-blooming, dwarf plant; cherry red with white stripes. **Pkt. 10c.**

Fine Mixed. Good mixture of small free-blooming colors. **Pkt. 5c.**

PASSION FLOWER (Passiflora). A half hardy perennial climber, shedding its leaves in winter. Grows luxuriantly either from cuttings or seed. A very satisfactory climber of immense growth, as it will cover a porch or small cottage in one summer.
Pink, evergreen foliage. **Pkt. 10c. Purple, pkt. 10c.**
Scarlet, evergreen foliage. **Pkt. 15c.**

White. This was the white-flowered vine hanging from Canary Island Date Palms on Palm Avenue, P. P. I. E. **Pkt. 5c.**

Pelargonium. See Geranium.

PENTSTEMON. One of our best flowers for the hardy perennial border; grows two feet high; flowers the first season from seed, and blossoms freely. Pentstemon sends up spikes of bright colored and spotted flowers somewhat like the Foxglove, but in a great variety of shades and colors. A decidedly beautiful and satisfactory flower. **Mixed, pkt. 10c.**

Excelsior Mixed. An extra superb strain of this fine flower. Selected for largest size and finest light colors. You will be pleased with this. **Pkt. 25c.**

PERENNIAL PEA. See Lathyrus Latifolius.

PERILLA NANKINENSIS. Has very dark bronze, almost black foliage. Similar to Coleus. Is of easy culture. A half hardy annual. **Pkt. 5c.**

Periwinkle. See Vinca.

PHYSALIS FRANCHETTI, or CHINESE LANTERN PLANT. A showy annual, growing two feet high and esteemed for its seed pods, which in fall change from brilliant yellow to scarlet, and which are round and pointed and resemble a small lantern. The fruit inside the pod is sometimes made into preserves. **Pkt. 10c.**

PLATYCODON GRANDIFLORA, or JAPANESE BELL. A giant bell flower, growing two feet tall and covered all summer with large steel-blue flowers. One of the very best perennials and should be more widely planted. **Pkt. 10c.**

Pinks. See Dianthus.

Polyanthus. See Primula.

PHLOX DRUMMONDII

PHLOX DRUMMONDII. Grandiflora. A hardy annual, growing from six inches to one foot high, and bearing beautiful soft-petaled and brilliantly colored flowers; in bloom all spring and summer. Fine for bedding and massing. Sow seed in the fall for early flowers.

Atropurpurea. Deep purple. **Pkt. 10c.**
Coccinea. Brilliant scarlet. **Pkt. 10c.**
Kermisina. Vivid crimson. **Pkt. 10c.**
Large Blood Red. Pkt. 10c.
Pure White. Pkt. 10c.
Rosy Chamois, with yellow center. **Pkt. 10c.**

Poppy—White Fringed

PHLOX DRUMMONDII—Continued

Splendens. Dwarf, bright red, with white eye. **Pkt. 10c.**

Violet, with white center. **Pkt. 10c.**

Yellow (Isabellina). Soft Primrose. **Pkt. 10c.**

Collection, one packet each of above nine sorts for 65c.

Fine mixture of all colors of the larger types. **Pkt. 5c; oz. 75c.**

Dwarf Compact. Mixed. Low-growing plants, with good-sized flowers. **Pkt. 10c.**

Starred and Fringed. Mixed. A mixture of star-shaped and pointed blossoms. **Pkt. 10c.**

POPPY

A well-known hardy annual, three to five feet high, and bearing single and large double blossoms in bright colors. Sow seed in open ground where plants are to remain and thin to six or twelve inches. If left thick the plants will be weak and spindling and the blossoms inferior. **To avoid getting the seed too thick,** it can be mixed with dry sand before sowing.

SINGLE VARIETIES—(Annual)

Cardinal. A bright scarlet, fringed, double. **Pkt. 5c.**

Cardinal Chamois. This is a beautiful salmon pink with very double flowers. This is an extra fine poppy. **Pkt. 5c.**

Double White, Paeony Flowered. Straight edges. **Pkt. 5c.**

Shrimp Pink. Large double, straight edges. **Pkt. 5c.**

White Fringed, or Carnation Flowered. Large, double fringed. **Pkt. 5c; oz. 30c.**

Large Double. Mixed. All colors. **Pkt. 5c; oz. 25c.**

SINGLE VARIETIES—(Annual)

Dannebrog. Brilliant scarlet, with white center; four large petals. **Pkt. 5c.**

Tulip Flowered. Intense scarlet, single blossoms. Plant about two and one-half to three feet high. **The brightest colored of all poppies. Pkt. 10c; oz. 50c.**

Shirley. The most beautiful type of poppies, having soft, hairy foliage and an immense variety of single blossoms in white, pink, lavender, purple, shades of red and scarlet. The petals are very dainty and look as if made from crepe paper. Free blooming and fine for bedding or tall border. Mixed. **Pkt. 10c; oz. 50c.**

Umbrosum. Vermilion petals, with black spots on each, similar to Shirley Poppy. **Pkt. 5c; oz. 30c.**

Collection of one packet each of above ten kinds for 40c.

PERENNIAL POPPIES

Hardy perennial, of easy culture; in bright, glowing colors. Blooms first year from seed.

Iceland, Mixed A graceful, delicate variety, 12 inches tall, with white, orange and yellow single blossoms, the petals resembling crumpled tissue paper. The plant is low and compact; excellent for cutting. Sow in the fall where plants are to remain and thin. **Pkt. 10c.**

Iceland Double White. Excellent dwarf white poppies in flower for a long time. **Pkt. 10c.**

Iceland Double Yellow. As fine as the white. **Pkt. 10c.**

PERENNIAL POPPIES—Continued

Orientale (the large Oriental Poppy). A hardy plant, bearing large, brilliant crimson flowers, with a black blotch on each petal. Very showy and attractive; two and one-half feet tall. **Pkt. 10c.**

Victoria. A large salmon-colored Oriental Poppy; each petal has a black blotch at the center. **Pkt. 15c.**

Bracteatum. Immense orange-scarlet flowers very similar to the Oriental Poppy. **Pkt. 10c.**

Shirley Poppies Growing for Seed on Our Seed Farm

PORTULACA. Low-growing or creeping tender annual, six to eight inches high, and bearing glossy, cup-shaped blossoms in very brilliant and gorgeous colors. The foliage and stems are thick. The seed germinates slowly and should be started under glass or when the weather is hot. These flowers love the sunshine and do best on rather dry ground; excellent for embankments.

Golden Yellow, pkt. 5c. **Scarlet, pkt. 5c.**
Pink, pkt. 5c. **White, pkt. 5c.**

PORTULACA—Continued

Single mixed, pkt. 5c.

Double. Mixed. Large flowering. **Pkt. 10c.**

POTENTILLA. Brilliant red flowers. Hardy perennial, 18 inches high. Often called Cinquefoil.

Single mixed, pkt. 5c.

Primrose, Evening. See Oenothera.

PRIMROSES

PRIMULA SINENSIS, or CHINESE PRIMROSE

Greenhouse or pot plants, bearing trusses of large single or double blossoms in bright colors, as well as soft tints. Sow seed in April or May for winter blooming. Our seed is from the very finest strains.

Giant Single Fringed Varieties—

Alba Magnifica. Pure white. **Pkt. 25c.**
Bright Blue, pkt. 25c.
Bright Rose, pkt. 25c.
Rosy Morn. Blush pink. **Pkt. 25c.**
Scarlet, pkt. 25c.
Single Fringed Varieties. A splendid mixture. **Pkt. 25c.**
Double Fringed Flowers. Saved from the finest blossoms. **Pkt. 50c.**
Filicifolia, or Fern Leaved Varieties. Mixed. **Pkt. 25c.**

Half Hardy Primulas—

Auricula. The Primrose of the Alps. Flowers variously colored, mostly yellow; fragrant. Seed from selected strain. **Pkt. 15c.**
Obconica Grandiflora. A lovely free-flowering Primula, white tinged with lilac, stems nine inches high. **Pkt. 25c.**
Veris Polyanthus. A hardy sort, blooming early in the open gardens. Colors mostly red and yellow. Mixed colors. **Pkt. 10c.**
Vulgaris. The true yellow English Primrose. **Pkt. 10c.**

PYRETHRUM. Parthenifolium Aureum, or Golden Feather. Small-cut leaves of bright golden yellow. A hardy perennial, with bright foliage, much used for edging and borders. Seed can be sown in the fall or spring and transplanted. **Pkt. 5c; oz. 50c.**

Roseum, or Insect Powder Plant. A hardy perennial, with red-petaled flowers radiating from a golden-yellow center. Buhach, or insect powder, is made from the dry leaves. A mulching to keep the soil moist will greatly aid in producing the handsome flowers of this variety. **Pkt. 5c.**

Grandiflorum (Roseum Hybridum). A large flowered type, with bright-colored and attractive blossoms for cutting. The flowers are often four inches across, and vary from light pink to deep carmine, centers yellow. Mixed. **Pkt. 10c.**

Seleginoides. Fern-leaved edging plant—of great beauty. **Pkt. 10c.**

RANUNCULUS. Very handsome double flowers, 10 inches high, about two inches across. Blooms the first year from seed. **Mixed. Pkt. 10c.**

Red-Hot Poker Plant. See Tritoma.

RHODANTHE (Everlasting Flower). One of the finest and the best beautiful of the many varieties of everlastings; for winter bouquets the blossoms should be gathered before fully expanded, and if dried in the shade will retain their brilliancy for years. Rose and white mixed. **Pkt. 5c.**

Ricinus. See Castor Oil Bean.

ROMNEYA COULTERI (California Tree Poppy). Also well known as the **Matilija Poppy.** This fine perennial is of a supreme and stately beauty. The flowers are large, four to five inches across, pure white, crinkled like crepe paper, with a fine bunch of yellow stamens, resembling white, single pæonies. The seed takes from three to nine months to germinate. **Pkt. 15c.**

RUDBECKIA (Cone Flower). Bicolor Superba. The center of this flower is brown, the petals golden yellow, with velvety brown spots at the base. A free-flowering annual; three feet high; very effective as a cut flower. **Pkt. 5c.**

SALPIGLOSSIS. A half-hardy annual, growing about three feet high and bearing trumpet shaped blossoms of rich shades and colors, all beautifully veined. It is valuable for bedding and massing, and its long stems make it excellent also for cut flowers. **Mixed. Pkt. 5c.**

Emperor (Superbissima). A splendid large-flowered strain; each stem is loaded with these most handsome flowers, each one richly veined with gold. **Pkt. 10c.**

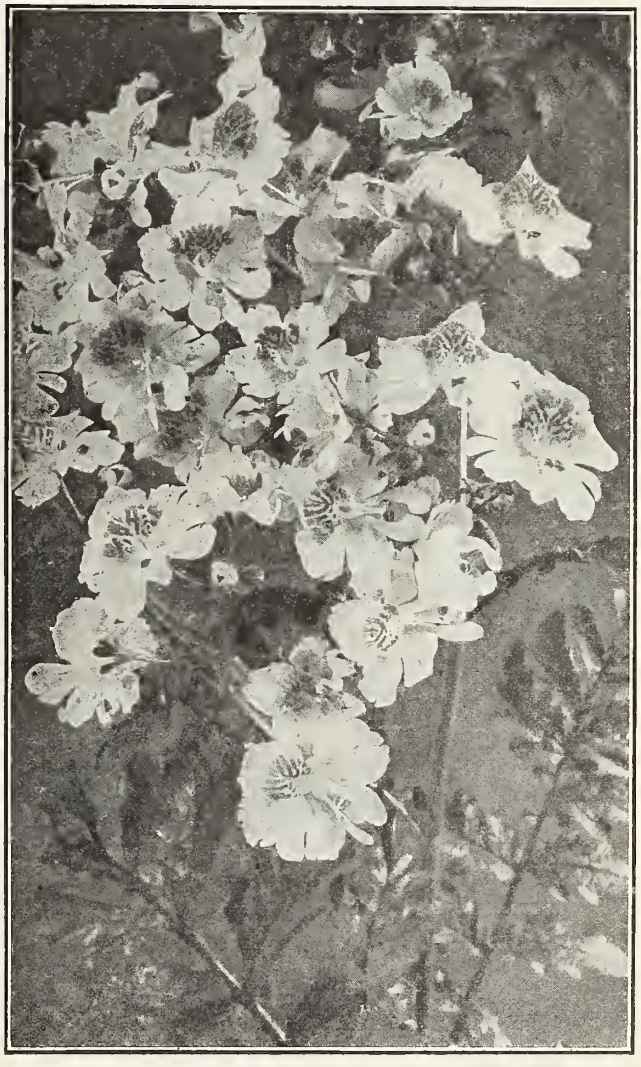
SALVIA or FLOWERING SAGE. A tender perennial blooming the first season from seed and growing two to three feet high. The blossoms are borne on long stems in racemes or spikes, and are fragrant. The plant forms a bunch and blooms profusely during the whole summer and fall.

Patens. Bright **blue** flowers, two feet tall. **Pkt. 25c.**

Splendens. Bright **scarlet** flowers. **Pkt. 10c; ¼ oz. 50c.**

Bonfire. A new dwarf Scarlet Sage, of dense compact growth, from 20 to 24 inches high; useful for bedding or borders. Flowers dark scarlet, on spikes which stand clear of the foliage and attract attention at once. **Pkt. 10c; ⅛ oz. 75c.**

Dark Blood Red. A new tall variety with large flower spikes, much darker and richer than other scarlets. Dazzling and beautiful, 3½ feet. **Pkt. 10c.**



Schizanthus Excelsior

SANVITALIA. Hardy trailing annual, six inches high, bearing bright yellow blossoms resembling miniature double Zinnia. Of easiest culture; valuable for rockwork or borders. **Procumbens Fl. Pl. Pkt. 5c.**

Schizanthus Retusus

SCABIOSA

SCABIOSA, or **MOURNING BRIDE.** Also called **Sweet Scabious, Old Maid's Pincushion,** etc. Our mammoth flowered strain of this old-fashioned flower is very beautiful and worthy of a place in every garden. The tall flowers are especially adapted for cutting and massing in the garden. Annual (self-sown in California), 2½ to 4 feet high. These new flowers are double clear to the center, covering the thimble-shaped cone

Mammoth Flowered, Double, or Maxima. Mixed. An improved strain, with large petals and beautiful colors. **Pkt. 5c.**

Dwarf Double Mixed, pkt. 5c.

Tall Double Snowball, pkt. 10c.

Tall Double Black Purple, pkt. 10c.

Tall Double Azure Fairy. Light blue. **Pkt. 10c.**

Tall Double Rose. Pkt. 10c.

SCABIOSA Caucasica. A hardy perennial variety, with pale blue flowers, four to five inches across, and long stems. One of the handsomest perennial flowers; valuable for cutting. **Pkt. 10c.**

Scarlet Flax. See Linum.

SCHIZANTHUS. Hardy annuals, growing one and one-half to two feet high, and covered with bright, showy, butterfly-like blossoms. Large flowering. **Mixed. Pkt. 10c.**

Wisetonesis. This variety is remarkably free-flowering and presents a beautiful appearance with its myriads of blooms, the ground color of which is white, dotted with delicate rose. A very shy seeder. Make several plantings, as the plants come into bloom quickly, are a burst of color and are out of bloom. **Pkt. 25c.**

Excelsior (Improved Wisetonensis). A selection with large flowers and light pleasing tones. The very handsomest of this pretty Butterfly Flower. **Pkt. 35c.**

Retusus. These Retusus Schizanthus have larger flowers than the preceding type and have longer stems. The flowers are borne farther apart on the stems and look more like an orchid than any out-of-door flower. Beautiful for the garden or the conservatory. Red orchid shaped flowers with yellow lip.

Retusus Albus. White flowers with a yellow blotch. **Pkt. 15c.**

Retusus Rosamund. Rosy lilac with yellow lip. **Pkt. 15c.**

Retusus Trimaculatus. Rosy crimson, with yellow lip. **Pkt. 15c.**

SEDUM, Coeruleum. Blue Stone Crop. A little annual bedding plant, four inches high; good in carpet work. **Pkt. 10c.**

SENECIO (Tall Double Jacobea). A showy, free flowering hardy annual. It produces, in great profusion, branching spikes of Cineraria-like double flowers, one and one-half inches in diameter, from spring until fall. Excellent for bouquets.

Elegans. Double mixed. **Pkt. 10c.**

SILENE, or CATCHFLY. Hardy annual, growing about one foot high and bearing small, attractive flowers in various colors. Of easy culture and valuable for bedding. **Mixed. Pkt. 5c.**

SMILAX. A climbing perennial with beautiful bright-green glossy leaves, much esteemed for its long delicate sprays of foliage. **Pkt. 5c; oz. 50c.**

SOLANUM CAPSICASTRUM (Jerusalem Cherry). A very ornamental plant for house or garden culture, the flowers being followed by small brightly colored fruit or berries, which almost completely cover the plants. Flowers and fruits the first season from seed. **Pkt. 10c.**

Solanum Seaforthianum. Only in California, in nearly frostless places, can this handsome vine be found as a perennial climber. The flowers are a lovely light blue, in immense drooping panicles, like clusters of Wisteria. Scarlet seed-berries follow the flowers. Six to twelve feet. May be treated as a tender annual. **Pkt. 15c.**

SPIDER PLANT. See Cleome Pungens.

STATICE SINUATA (Sea Lavender). A blue everlasting flower much used by florists for winter bouquets. Annual, two to three feet. Each floweret is small, but the plant is very effective. The seed is difficult to germinate. **Pkt. 5c.**

Yellow. Pkt. 10c.

STEVIA. A tender perennial, one and one-half feet high, and bearing clusters of small, white, fragrant blossoms. Suitable for summer or winter blooming, and for pot culture or open air. **Serrata. Pkt. 10c.**

STOKESIA, or CORNFLOWER ASTER. A hardy perennial, two feet high, and bearing large blue flowers on long stems. Blooms freely all summer and fall, and is of easy culture, but is hard to start from seed.

Cyanea, pkt. 10c.

Stone Crop. See Sedum.

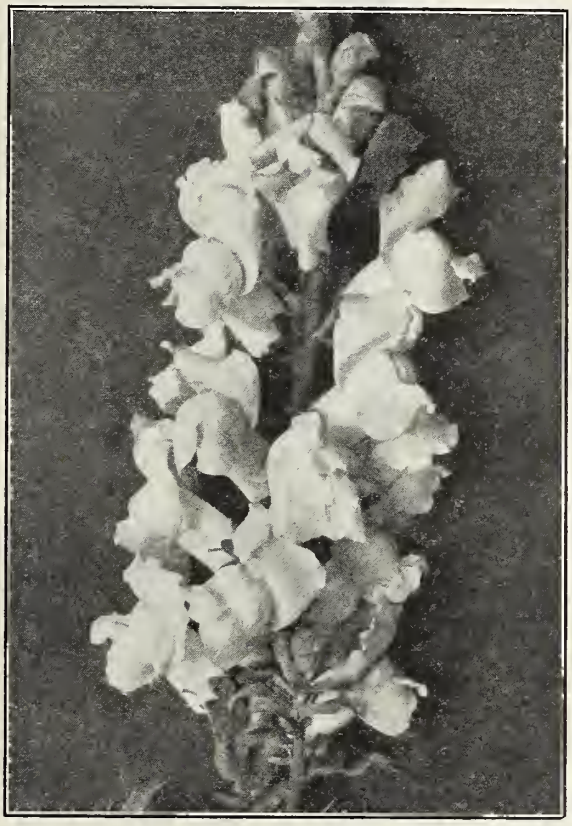
STRAWFLOWERS. See Acrolinium, Gomphrena, Helichrysum, Honesty, Statice, Rhodanthe, Xeranthemum.

Sunflower, Miniature Grandiflora

Morse's SNAPDRAGONS

Just now the most popular flower is the Antirrhinum or Snapdragon. Wonderful development has been made in these lovely flowers, increasing their size and adding shades of most delicate pink and of blended buff and amber. Already we had fine whites, yellows and maroon. These newest sorts, which we offer below, are different from the older types, more varied and more beautiful. Use the Intermediate type for bedding—the spikes will be the best size for cutting, while for bedding the height will be just right.

Snapdragons are biennial and may be sown in the fall or in the spring out of doors where they are to remain, or they may be sown in boxes and transplanted. Snapdragons are fine cut flowers, easily raised.



Morse's Snapdragon Venus

TALL, LARGE FLOWERING TYPE

24 to 30 inches tall.

Blood Red. Rich dark crimson maroon with dark foliage. **Pkt. 10c.**

Cottage Maid. Beautiful pale pink with white throat; dainty and pretty. **Pkt. 10c.**

Cresoia. Scarlet. **Pkt. 10c.**

Firefly. Scarlet and white. **Pkt. 10c.**

Queen Victoria. Pure white. **Pkt. 10c.**

Venus. A delicate shade of pink, white tube. Large flower and deeper than Cottage Maid. **Pkt. 15c.**

Vermilion Brilliant. Fine orange scarlet. **Pkt. 10c.**

Yellow. Large, golden yellow. **Pkt. 10c.**

Giant Striped Mixed. Finest Scotch strain, unsurpassed for size and beauty and variety of these sorts. **Pkt. 15c.**

Collection of 1 pkt. each of 9 named kinds for 75c.

Giant Flowered. Mixed. **Pkt. 10c.**

INTERMEDIATE TYPE

15 to 24 inches high—for bedding

Those Snapdragons shown on last year's catalogue in colors were as follows: No. 1, Amber Queen; No. 2, Crimson Queen; No. 3, White Beauty; No. 4, Golden Queen; No. 5, Diana; No. 6, Mauve Beauty; No. 7, Firefly (Tall); No. 8, Carmine Queen.

1. **Amber Queen.** Blended yellow with old rose lips; very large flower. **Pkt. 15c.**

Black Prince. An even wine maroon color. **Pkt. 10c.**

Buff Queen. Lovely shade of rose with shaded orange lip. **Pkt. 10c.**

8. **Carmine Queen.** Even light carmine, distinct and pretty color. **Pkt. 15c.**

2. **Crimson Queen.** Very dark velvety red with dark tube. **Pkt. 10c.**

Delicata. Delicate pink on white ground, like Cottage Maid. **Pkt. 10c.**

5. **Diana.** Beautiful clear bright pink with white throat. **Pkt. 10c.**

Fascination. Deep flesh pink; new. **Pkt. 15c.**

Fiery Cross, Morse's. Intense orange scarlet of brightest shade. **Pkt. 25c.**

4. **Golden Queen.** Large rich yellow. **Pkt. 10c.**

Grenadier. Novelty, orange-scarlet face with yellow lip and having a white tube. Whole effect is bright flame deep yellow and white. **Pkt. 20c.**

6. **Mauve Beauty.** An entirely new and rare color. A lovely shade of pale clear mauve. **Pkt. 20c.**

Maize Queen. Blended yellow face and center, tube light pinkish bronze; large blended flowers. **Pkt. 10c.**

Niobe. Very dark maroon with white throat. **Pkt. 10c.**

Nobile. Blush white with distinct carmine blotch at throat, white tube; very striking and effective. **Pkt. 10c.**

The Fawn. Novelty. Rosy-fawn color with white tube and yellow lips; face beautifully blended; a fine bright new shade. **Pkt. 15c.**

Vesuvius. Orange or flame color. **Pkt. 5c.**

3. **White Beauty.** The finest white. Award of Merit R. H. S. **Pkt. 15c.**

Buy named sorts for finest varieties and results.

Collection. Five or more packets of above at 20 per cent from total price for the individual pkts.

Picturatum. Striped and blotched. **Pkt. 10c.**

Intermediate Grandiflora Mixed. Pkt. 10c.

Tom Thumb, or Dwarf. Mixed. **Pkt. 5c.**

SUNFLOWER (Helianthus). Hardy annuals, growing from three to six feet high. Of the easiest culture and suitable for a stately row or background. Plant when the ground is well warmed in light or sandy soil.

Chrysanthemum Flowered. Large, densely double, bright golden flowers. The plant branches and affords fine, long stout stems for cutting. This is the best variety in existence; six to eight feet. **Pkt. 5c; oz. 25c.**

Cucumerifolius Perkeo (Miniature Sunflower). The Cucumerifolius sunflowers are small both in flower and plant, and are often called Cut and Come Again Sunflowers. Perkeo is only two feet tall, but is covered with small (three-inch) golden yellow flowers with a dark eye. **Pkt. 10c.**

Cucumerifolius Stella. Is considerably taller than Perkeo and has larger single flowers, six inches across; yellow with black center. **Pkt. 5c; oz. 50c.**

Cucumerifolius, Double Hybrids. Double and semi-double miniature sunflowers. **Pkt. 10c.**

Miniature Grandiflora. This pretty sunflower grows to be 8 feet tall and has late in summer bright golden yellow flowers on stiff stem; fine for cutting. This is a pretty and refined flower 4 inches across. **Pkt. 10c.**

SUNFLOWER—Continued

Red Sunflower. The flowers vary greatly in size, from four to seven inches across. There is also much variation in shade and coloring—some are solid red, of a deep maroon shade; others are red with petals gold tipped, and a variety of other pleasing combinations of red and gold. Planted in a border or in front of taller shrubbery or along a wall, they are very showy. **Pkt. 15c.**

Sweet Alyssum. See Alyssum.

SWEET ROCKET (Hesperis). A hardy perennial, growing two to three feet high. An old-fashioned, fragrant flower of the easiest culture, and bearing clusters of white and purple blossoms. Mixed. **Pkt. 5c.**

Sweet Sultan. See Centaurea Moschata.

SWEET WILLIAM (Dianthus Barbatus). A beautiful sweet scented old-fashioned perennial. Grows one to two feet high and bears its flowers in clusters at the end of a stiff stem. The individual flowerets are handsomely colored and marked. It makes a beautiful bedding plant, and is of easy culture; h. p.

Single Varieties. Mixed. More attractive than the double. **Pkt. 5c; oz. 25c.**

Double Varieties. Mixed. **Pkt. 5c.**

STOCKS

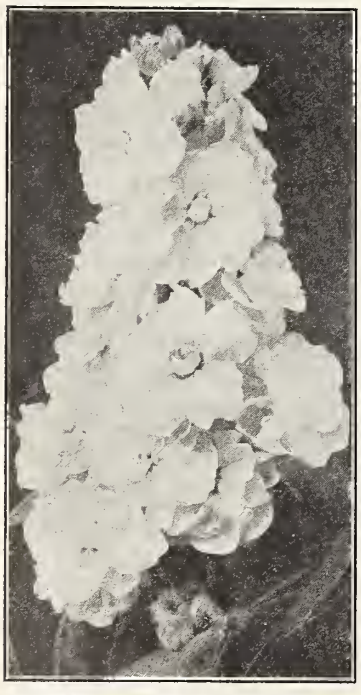
Ten Weeks Stocks, or Gilliflowers; Levkoje

Stocks are one of the old-time favorites, and no garden was considered complete without its row of these beautiful flowers. They come in all shades—delicate pink, white, red, cream and purple. Stocks are annual and hardy; they may be sown out of doors in spring, or in boxes in winter and transplanted. Sow early ⅛ inch deep. While all will flower the first year, the Dresden, Brompton and Winter Stocks will last for two years.

Stocks have been greatly improved by selection, and our strains, which are raised by expert growers, give fully 80 per cent of double flowers, where others give only half this percentage. There always will be some single plants, as those are the only ones which bear seed, and the plants should be set out in the garden sufficiently close for these single ones to be pulled up when they show their first flower, and still leave plenty of fine double plants. Stocks are of easy culture, are a long time in bloom, are hardy, beautiful and very satisfactory.

SUMMER STOCKS

Morse's Dwarf Large Flowering Ten Weeks: Our strain of these has great rosettes set closely together so that the entire plant is hidden in the mass of bloom. Plants 12 to 15 inches tall and early; the best for bedding effects or edges. Ours is a selected strain.



STOCK—Dwarf Large Flowering Ten Weeks. Type with closely set blossoms.

Blood Red, pkt. 10c.
Lavender, pkt. 10c.
White, pkt. 10c.
Canary Yellow, pkt. 10c.
Pink. Very dainty. **Pkt. 10c.**
Carmine Pink, pkt. 10c.
Purple, pkt. 10c.
Mixed, pkt. 10c.

Collection of eight sorts for 60c.

Giant Perfection. An early or Ten Weeks' Stock, with tall spikes of large very double flowers. This stock branches into a pyramidal form and is two feet tall. **Mixed. Pkt. 10c.**

Cut and Come Again, or Dresden Perpetual. A type of early flowering Stock with large flowers on tall spikes. These stocks are perpetually in bloom and make fine cut flowers.

Dresden Mixed, pkt. 10c.

Princess Alice, or Dresden White. A pure white double Stock very largely used by florists. **Pkt. 15c.**

Stocks Nice Mixed. Type with loosely set blossoms.

NICE STOCKS

FOR SUMMER AND WINTER

Tall stocks nicely branching, having large double flowers, not tightly clustered but borne along the entire stem. Sow in July and August and they will flower all winter. There are many new varieties in this class. May be treated as summer stocks, for they bloom quite early from seed; two feet; h. p.

Almond Blossom. Blush pink, shaded deeper. **Pkt. 15c.**
Beauty of Nice. A beautiful flesh pink. **Pkt. 15c.**
Crimson King. Splendid crimson color. **Pkt. 15c.**
Light Violet. A most pleasing light shade. **Pkt. 15c.**
Mont Blanc. Improved pure white. **Pkt. 15c.**
Monte Carlo. A good yellow. **Pkt. 15c.**
Nice Purple. Purple or violet color. **Pkt. 15c.**
Nice Stocks Mixed, pkt. 15c.

WINTER STOCKS

This class of later flowering Stocks is coming into greater popularity as more varieties are introduced. Last year we had a fine new white Stock of this class, called *White Lady*. The plants are of fine symmetrical habit, bushy, and from 18 to 24 inches tall. These Stocks branch freely and the branches are well set with double flowers.

Emperor Large Flowering. A very fine double biennial Stock, with finest flowers closely set on spikes, about 16 inches high. Good for open garden or for pot culture. **White, pkt. 20c. Mixed, pkt. 20c.**

White Lady. Our new pure white winter Stock grows about 20 inches high, has large branches bearing lustrous snowy white, double flowers most freely. The grandest white Stock there is. **Pkt. 25c.**

Winter, or Perennial Brompton. Late flowering. Mixed. **Pkt. 20c.**

THUNBERGIA, or BLACK-EYED SUSAN. A hardy annual climber, growing about four feet long, and valuable for low fences or hanging baskets. Prefers a sunny situation. Blossoms are buff, orange or white, with dark centers. **Mixed. Pkt. 5c.**

Tithonia Speciosa. A new orange-colored flower resembling a single Zinnia in form. The bush is rather rank growing but there are many places where this would be just the plant wanted. Starts blooming at 2 feet and grows to 6 feet high. Well adapted to California. Flowers are on stiff stems. **Pkt. 10c.**

TORENIA. A hardy annual, with trumpet-shaped flowers and growing four to six inches high; in bloom all summer. Good for hanging baskets or borders, or for bedding. In the hot parts of California where Pansies do not do so well Torenia will be found an excellent substitute, as it thrives under such conditions.

Fournieri. Velvety blue, with three dark spots of indigo and a bright yellow throat. **Pkt. 5c.**

White Wings. Dainty, white flowers, tinted with rose at throat. **Pkt. 10c.**

TRANSVAAL DAISY (Gerbera Jamesoni). This is a recently introduced South African Daisy of intense vermilion color. Flowers four inches across, on tall stems 18 inches high. Sow seed upright, stem end up, in box of peat and loam. Two plants from a package is a fair average. Do not over-water; very beautiful; t. p. **Per pkt. of 15 seeds, 25c.**

TRITOMA, New Hybrids (Red-Hot Poker Plant). The plants make a dazzling spot in the garden in summer and fall; their tall spikes (four feet) contain over one hundred flowers of bright orange or scarlet or yellow. South African perennials well adapted to California. **Pkt. 15c.**

VALERIAN. Flowers like Centranthus, does well in half shade, 2½ feet. h. p. **Mixed. Pkt. 5c.**

VERBENA. A half-hardy trailing perennial of easy culture. While it grows readily from division of the root or from cuttings, it does best from seed. Use extra care in starting as seed is rather difficult to start well. Seed may be soaked in warm water to hasten germination. It is well known as a bedding or border plant, and the improved large flowered and fragrant strains make it a handsome cut flower for low vases.

Mammoth Auricula Flowered. Various colors, with large white centers. **Pkt. 10c.**

Mammoth Flowered. Mixed. Pkt. 10c.

Pink Shades. Mammoth strains of rose and pink shades. Crop failed.

Pure White. Mammoth strain. **Pkt. 10c.**

Purple and Blue Shades. Mammoth strains. **Pkt. 10c.**

Scarlet Defiance. Brilliant scarlet. **Pkt. 10c.**

Striped Varieties. Mixed. **Pkt. 10c.**

Hybrida Gigantea. New giant Auricula-flowered Verbena in new and beautiful shades. **Per pkt. 20c.**

Morse's Extra Selected Mammoth Strain. Mixed. Pkt. **15c.**

VINCA, or MADAGASCAR PERIWINKLE. A tender perennial, with ornamental foliage, useful for bedding in summer and for the greenhouse in winter. Blooms freely the first year from seed. The trailing blue Vinca or Myrtle never seeds; see plant list. Rose, crimson, white, etc. **Mixed. Pkt. 10c.**

VIOLAS, or TUFTED PANSIES. These have smaller flowers than the regular pansies, but bear them so profusely that they are preferred for bedding effects where color only is wanted; six inch; h. h. p.
Purple (Cornuta), pkt. 10c.
White, pkt. 10c.
Yellow, pkt. 10c.
Mixed, all varieties, pkt. 10c.

VIOLET, or VIOLA ODORATA. Although these flowers do best propagated from cuttings, they grow readily from seed, and produce a very fragrant blossom. We offer the large flowering favorite blue variety. **Single, Sweet-scented. Pkt. 10c.**

VIRGINIA CREEPER (Ampelopsis Quinquefolia). Perennial climber. Large leaves, which color in the fall; also bears clusters of dark fruit, flowers inconspicuous. very ornamental and easily raised from seed. Height 30 feet. **Pkt. 5c; oz. 25c.**

VIRGINIA STOCKS. A hardy annual, growing about nine inches high and blooming profusely. Of easy culture, and can be had in continuous bloom by sowing the seed at frequent intervals during spring and summer. **Red and White mixed. Pkt. 5c.**

Mammoth Flowered Verbena

VISCARIA (Rose of Heaven). Pretty, profuse flowering plants; adapted for beds, edgings or clumps, growing readily in any garden soil; flowers pink and white, shaped somewhat like a single pink; annual; 12 inches tall. **Pkt. 5c.**

WALLFLOWER. Half-hardy perennial, blooming the first year from seed. 1 to 2 feet.

Dwarf German Double, pkt. 10c.

Tall German Double. Mixed colors. **Pkt. 10c.**

Fine Single. Mixed. **Pkt. 5c.**

Tom Thumb Golden. Small, compact plant, single blossoms. **Pkt. 10c.**

WISTARIA, Chinese Flowering, Tall Blue. One of our most popular hardy climbers, growing to a height of 50 feet. The flowers are abundantly borne in spring on long drooping racemes of light blue before the leaves appear. **Pkt. 15c.**

XERANTHEMUM (Everlasting Flower). Annual; two feet; bearing white, purple or yellow blossoms. **Double Mixed. Pkt. 5c.**

Zinnia—Double Giant

ZINNIA. A half-hardy annual, growing from one to two feet high. Blossoms are very double, and while the stems are stiff they make an excellent bouquet flower. Probably no flower has such an assortment of bright shades, tints and colors; no bedding plant is more effective for a brilliant show. Sow in boxes early and transplant.

Elegans Double:
Black Purple, pkt. 10c.
Dark Crimson, pkt. 10c.
Magenta, pkt. 10c.
Scarlet. Very bright. **Pkt. 10c.**
White, pkt. 10c.
Yellow, pkt. 10c.
Mixed. All colors. **Pkt. 5c.**

Collection of 6 colors for 45c.

DOUBLE GIANTS (Grandiflora Robusta Plenissima). New large giants. Flowers large in size and depth. An excellent, much improved strain. We can also supply now this grand Zinnia in the following separate colors, **all at 15c per pkt.; ½ oz. 50c:**

Crimson **Purple** **White**
Flesh Pink **Scarlet** **Mixed**
Golden Yellow

Collection of any 2 pkts. for 25c.

Double Lilliput. A dwarf plant. **Mixed. Pkt. 5c.**
Pompon Mixed. This has globe-shaped flowers. **Pkt. 5c.**
Elegans. Tall double. Mixed. **Pkt. 5c.**
Striped, or Zebra. Mixed. **Pkt. 5c.**

California Wild Flower Collection

The descriptions of these beautiful wild flowers you will find in the list of Flower Seeds under their alphabetical order. We have given below descriptions of those sorts not listed elsewhere. What could give more pleasure than growing these beautiful wild flowers at home? One packet of each is included in this collection. If some variety does not seed this year, we will substitute with another sort.

ONE DOLLAR'S WORTH OF SEED FOR 75c

Baby Blue Eyes, see Nemophila Insignis
Blazing Star see Bartonia Aurea
Blue Gilia " Gilia Achilleaefolia
California Poppy " Eschscholtzia Californica
California Wild Lilac " below
Clarkia " Clarkia Elegans
Evening Primrose " Oenothera
Farewell to Spring " Godetia Amoena
Lupin " Lupin
Matilipa Poppy " Romneya Coulteri
Sand Verbena " Abronia Umbellata
Scarlet Bugler (Penstemon Centranthifolius. Strikingly beautiful brilliant scarlet wild flower. 2 ft. p. Grows in dry, gravelly places. **Pkt. 15c.**
Sweet-scented Shrub, California, below.

ALL POSTPAID FOR 75c

Alice's Wild Flower Garden

Alice is a real person, a teacher of botany in San Francisco. She began by growing wild flowers for her classes and then saved the seed. Six of these sorts are enclosed in a packet handsomely painted by hand in water colors. This packet is most beautiful and dainty and makes an ideal gift at Christmas or other time. **Each 50c.**

California Wild Lilac (Ceanothus). In spring the open hillsides have patches of brilliant blue standing out from among the other shrubs. This is the Wild Lilac or Blue Blossom; an evergreen shrub with rich, shining leaves and feathery clusters of tiny blue flowers. Worthy of a place in every garden. Start the seed under glass and transplant. **Per pkt. 15c.**

Sweet-scented Shrub, California (Calycanthus Occidentalis). This delightful shrub is often found upon the banks of small streams in the lower Sierras, but it does well when grown in the garden, as the specimen at the University of California grounds shows. The flowers are chocolate or wine colored and have a spicy fragrance when crushed. This variety is larger than the Eastern one, and is one of our most pleasing shrubs. Seed can be easily started in the open. **Per pkt. 15c.**

SWEET PEA MIXTURES

To those who are going to make Sweet Peas their hobby, and who intend growing the flowers for the love of them, we would strongly advise the purchasing of separate varieties. For the convenience, however, of those who wish large quantities of bloom, both for cutting and garden effect, we have carefully made up the following mixtures:

Morse's Superb Spencer Mixture

This mixture is made up from our carefully prepared formula. It contains practically all the true Spencer varieties introduced to date. Great attention is given to secure a beautiful light mixture and yet include all shades nicely balanced and proportioned.

To make a better mixture of Sweet Peas than Morse's "Superb" would be impossible. Per pkt. 10c; oz. 30c; ¼ lb. 85c; 1 lb. $2.50.

Best Large Flowering Mixture of Grandifloras

This is the best possible mixture that can be made from existing Grandiflora or Eckford varieties. It has been our endeavor to secure, not only by well studied and carefully arranged formula, but by test from time to time, the best balanced mixture of color for the admirers of the Grandiflora type, and those in search of a good mixture at a low price. **Per pkt. 5c; oz. 15c; ¼ lb. 40c; 1 lb. $1.25.**

MORSE'S SWEET PEAS

Awarded GRAND PRIX - Panama-Pacific International Exposition, San Francisco, 1915. (Growing exhibit on Cordon System).

Awarded Medal of Honor - Collection of 100 varieties Spencer Sweet Peas. (Col. blooms at American Sweet Pea Society's Show, San Francisco, 1915.)

Awarded Gold Medal (British Sweet Pea Society.) - Medal given by British S. P. Society for best trade display of Sweet Peas at the American Sweet Pea Society's Show, San Francisco, 1915.

The Highest Possible Awards to be Obtained for Sweet Peas

We are known the world over as the Largest and Best Growers of Sweet Peas

Our Special Sweet Pea Booklet entitled **"Sweet Pea Culture,"** giving full and practical instructions for growing Sweet Peas for exhibition purposes and for garden decoration, will be gladly mailed **Free** to anyone requesting it.

Early Flowering Long Season Spencers

The latest in Sweet Peas. Suitable for all warm climates, tropical countries, and in Japan, Australia, New Zealand and Hawaii.

These novelties have been raised in our own Sweet Pea "workshop" by crossing the Early Flowering Grandifloras with the large Late Spencers. They are quite fixed, both as to type and color.

The Early Flowering Long Season Spencers will commence to bloom in from ninety to one hundred days from date of planting. They should be planted in all hot climates in preference to the Late Flowering Spencers, but **for cool climates the Late Flowering Spencers should be planted.**

New Early Flowering Long Season Spencers

THESE NOVELTIES ARE ILLUSTRATED IN COLORS ON BACK COVER.

EARLY MORNING STAR—We put this novelty at the beginning of our list because we think it the best and most distinct. The color is a deep orange scarlet or flame color in standard with rich orange pink wings. The flower is practically the same color as the late flowering Spencer "Dobbie's Thomas Stevenson." The flowers are large and of best Spencer form and borne in threes and fours in wonderful profusion. Per packet of 15 seeds, **25c.**

EARLY SONG BIRD—We are sure this will be the leading pale pink. The flower is the same color as "Florence Morse Spencer" and "Lady Evelyn Eyre" and a bit lighter than "Elfrida Pearson." It has the same excellent form and features of Mrs. Hugh Dickson, but is on white ground. The placement of the flowers is splendid and the flowers are borne on long stems in threes and fours. When in full growth it seemed as though every stem carried four large blossoms. This was a wonderfully fine patch and most attractive because of the great quantity of blooms and the beautiful soft shade of pink. Per packet of 25 seeds, **25c.**

EARLY MELODY—This is a deeper shade of pink than "Early Song Bird"; on white ground, closely resembling "Countess Spencer" and near "Hercules." It might be described as rose pink on white ground. The effect when bunched is most pleasing. It is very floriferous. The flowers are borne on long stems and mostly four large, well-waved blossoms to each stem. This is sure to be a great favorite. Per packet of 25 seeds, **25c.**

EARLY SPRING MAID—Those who are familiar with the late flowering Spencer "Mrs. Hugh Dickson" will have a good idea of what a handsome variety this is. The color is light pink on a cream ground and the blossoms have the same splendid characteristics of "Mrs. Hugh Dickson." It is a most effective flower and, like our other Early Flowering Spencers, it carries a great wealth of blossoms, borne in fours on long stems. There is no Early Spencer cream pink which is as attractive as "Early Spring Maid." Per packet of 25 seeds, **25c.**

EARLY SNOW FLAKE—This is the best Early Flowering White Seeded White Spencer we have seen. The blossoms are very large and of the best waved Spencer form. The flowers are borne in wonderful profusion on long stems. The form is every bit as good as our noted strain of "White Spencer," and for this reason will be in great demand by all who grow Sweet Peas. Per packet of 15 seeds, **25c.**

EARLY HEATHER BELL—This will be one of the most popular shades, as it will be so useful for any occasion. It is a little like the variety known as "Anita Wehrman," but vastly superior in every way. The flowers are very large, borne in fours and threes on long, stout stems, and are of beautiful bold Spencer form. The color is a rich but pleasing mauve, but after standing in water the color becomes a beautiful mauve lavender. Per packet of 25 seeds, **25c.**

Collection of 6 varieties, 1 packet of each, $1.25.

Spencer Sweet Pea
Constance Hinton

Spencer Sweet Pea
Elfrida Pearson

Morse's Sweet Pea Collections

(All packets are full sized and separate.)

Morse's $1.00 "Grand Prize" Collection

15 OF THE BEST SPENCER VARIETIES.

Dainty Spencer: Best Picotee white edged rose.
Dobbie's Cream: Best cream Spencer.
Dobbie's Lavender George Herbert: Very fine lavender.
Elfrida Pearson: Best and largest light pink.
George Herbert: Best rose crimson.
Helen Lewis: Best orange.
Illuminator: Beautiful salmon orange.
King Edward Spencer: Best red.
King White: Best white.
Hercules: Best Rose pink.
Margaret Atlee: Best deep cream pink.
New Margaret Madison: Best pale lavender.
New Miriam Beaver: Best light cream pink.
Rosabelle: Best bright rose.
Royal Purple: Best purple.

These varieties were included in our Prize Winning Exhibits, P.-P. I. E., 1915

Morse's "Medal of Honor" Collection, 75c

7 OF THE LEADING SPENCER VARIETIES AND 1 PKT. WORKSHOP SEEDLINGS.

Barbara: Best salmon orange.
Blue Picotee: Best blue-edged variety.
Constance Hinton: Very large white.
Mrs. Hugh Dickson: Beautiful light cream pink.
King Edward Spencer: Best red.
Thomas Stevenson: Best giant orange.
R. F. Felton: Best lavender.
Workshop Seedlings: Wonderful giant Spencer flowers in exquisite shades.

These varieties were included in our Prize Winning Exhibits, P.-P. I. E., 1915

Morse's "Gold Medal" Spencer Collection, 25c

4 OF THE VERY BEST SPENCER SWEET PEAS.

Royal Purple: Best purple.
New Miriam Beaver: Best light cream pink.
King White: Best white.
King Edward Spencer: Best red Spencer.

These varieties were included in our Prize Winning Exhibits, P.-P. I. E., 1915

Morse's Extraordinary Spencer Collection

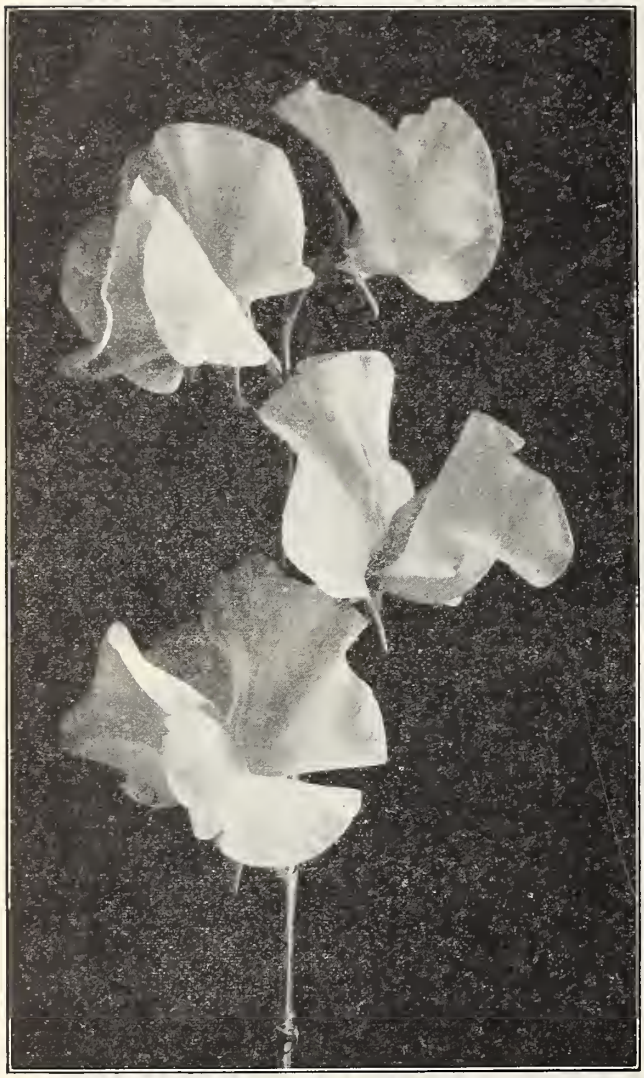
35 VARIETIES FOR $2.50, INCLUDING NEW MIRIAM BEAVER.

Agricola: White flushed heliotrope.
America Spencer: Best red stripe.
Bertrand Deal Imp: Large rosy lilac.
Blue Picotee: Best blue edged.
Clara Curtis: Large cream.
Dainty Spencer: Best pink edged.
Dobbie's Cream: Best cream.
Dobbie's Lavender Geo. Herbert: Very fine blue lavender.
Doris Usher: Beautiful cream pink.
Elfrida Pearson: Best pale pink.
Flora Norton Spencer: Very fine blue.
Florrie: Best magenta and purple.
Gaiety Spencer: Fine rose stripe.
Geo. Herbert: Best rose crimson.
Illuminator: Beautiful salmon orange.
Jessie Cuthbertson Spencer: Cream flaked red.
King Edward Spencer: Best red.
King White: Best white.
Margaret Atlee: Best deep cream pink.
Marie Corelli: Fine bright rose.
Marks Tey: Large purple maroon.
New Margaret Madison: Best pale lavender.
New Miriam Beaver: 1916 Novelty, best light cream pink.
Mrs. Cuthbertson: Best rose bicolor.
Mrs. C. W. Breadmore: Best cream rose edged.
Mrs. Hugh Dickson: Fine pale cream pink.
Nubian: Best maroon.
R. F. Felton: Best lavender.
Rosabelle: Best bright rose.
Royal Purple: Best purple.
Senator Spencer: Best chocolate flake.
Stirling Stent: Best salmon colored.
Thomas Stevenson: Best giant orange.
Veiled Bride: Fine rose flaked.
Wedgwood: Best blue.

General List of Morse's "Grand Prize" Sweet Peas

NOTE: Initials (E. F.) means Early Flowering or Christmas Type; (G) means Grandiflora or shell-shaped standard type; (S) means waved or Spencer Giant Flowered Type.

(PRICE IS 10c PER PACKET, EXCEPT WHERE NOTED OTHERWISE. IF INTERESTED IN LARGER QUANTITIES THAN HERE, WRITE US.)



Spencer Sweet Pea
New Miriam Beaver

White

CONSTANCE HINTON (S). Probably the largest white Spencer; slight tint of pink when young. Per pkt. 15c.

Dorothy Eckford (G). White seeded, large shell shaped. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

ETTA DYKE (S). Large pure white. Oz. 50c.

KING WHITE (S). A giant white. Per pkt. 5c; oz. 35c.

Mont Blanc (E. F.). The best forcing white. Oz. 25c.

MRS. SANKEY SPENCER (S). Very large, black seeded. Oz. 35c.

Shasta (G). Very large open form, white seeded. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

WHITE SPENCER (S). Morse's Re-selected, a superior strain of the very finest Spencer. Oz. 50c.

Cream Pink Shades

DORIS USHER (S). Light salmon pink. Pkt. 15c; oz. 50c.

ETHEL ROOSEVELT (S). Primrose, with light pink flakes and stripes. Most beautiful deep cream pink Sweet Pea. Oz. 35c.

JESSIE CUTHBERTSON SPENCER (S). Ground color cream overlaid with stripes of bright rose pink.

MARGARET ATLEE (S). Most beautiful deep cream pink Sweet Pea. Color warm salmon pink perfectly suffused over cream ground. Per pkt. 5c; oz. 35c.

MRS. C. W. BREADMORE (S). Primrose with pink edges. Oz. 35c.

MRS. HUGH DICKSON (S). Buff, apricot and rose. Oz. 35c.

MRS. ROUTZAHN (S). Apricot, pink and straw color. Oz. 35c.

NEW MIRIAM BEAVER (S). Soft shell pink and salmon. Per pkt. 15c.

W. T. HUTCHINS (S). Buff and light primrose, shading to apricot at margins. Oz. 35c.

Pink Shades

AGRICOLA (S). Pale pinkish heliotrope, flushed over white ground. Per pkt. 15c.

COUNTESS SPENCER (S). The original giant flowered Spencer. Clear pink. Per pkt. 5c; oz. 35c.

DAINTY SPENCER (S). White with rose-pink edges. Oz. 35c.

ELFRIDA PEARSON (S). Light pink or white, edged and shaded. Per pkt. 5c; oz. 35c.

FLORENCE MORSE SPENCER (S). White and blush pink edge. Oz. 35c.

HERCULES (S). Clear pink, larger than Countess Spencer. Oz. 50c.

Janet Scott (G). Clear pink at base and shading to buff at edges. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

Lovely (G). White ground, blotch of deep pink at base shading to lighter pink and flesh. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

MARTHA WASHINGTON (S). White with bright pink margin. Oz. 35c.

Mrs. F. J. Dolansky (E. F.). Best early; pure light pink. Oz. 25c; ¼ lb. 75c.

Prima Donna (G). The most popular clear pink hooded. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

VEILED BRIDE (S). Marbled pink on white.

Primrose, Cream or Ivory Shades

CLARA CURTIS (S). Very large, wavy cream, or light primrose. Oz. 35c.

DOBBIE'S CREAM (S). Large and fine; deep cream.

Hon. Mrs. E. Kenyon (G). Large, semi-hooded, white seeded. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

PARADISE IVORY (S). Light primrose with slight tint of pink. Oz. 35c.

PRIMROSE SPENCER (S). Clear primrose, large and wavy, white seeded. Oz. 35c.

QUEEN VICTORIA SPENCER (S). Black seeded, open blush, but turns primrose. Oz. 35c.

GENERAL LIST OF MORSE'S GRAND PRIZE SWEET PEAS—Continued

PRICE IS 10c PER PACKET EXCEPT WHERE NOTED.

Rose and Very Light Pink—Bi-Color

APPLE BLOSSOM SPENCER (S). Standard bright rose, wings primrose, with a flush of rose. Oz. 35c.

BLANCHE FERRY SPENCER (S). Rose standard, white wings, tinted light pink. Oz. 35c.

Earliest of All, or Extra Early Blanche Ferry (E. F.). Bright rose standard with white wings. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

Jeannie Gordon (G). Standard bright rose, wings primrose, tinted with light rose. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

MRS. CUTHBERTSON (S). Giant flowered rose and light pink. Per pkt. 5c; oz. 35c.

Orange and Salmon Pink Shades

AURORA SPENCER (S). Bright orange-pink striped, mottled and flaked on white. Oz. 35c.

BARBARA. Bright salmon orange with dark stems. Per pkt. 15c.

CONSTANCE OLIVER (S). Cream ground suffused with orange-rose. Oz. 35c.

HELEN LEWIS (S). Orange-pink, with bright orange standard. Oz. 35c.

ILLUMINATOR (S). Brilliant orange-scarlet. Per pkt. 5c; oz. 35c.

Miss Willmott (G). Bright orange-pink, showing veins of a deeper tint. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

STIRLING STENT (S). Metallic salmon. Oz. 50c.

St. George (G). A brilliant orange-pink, or, more correctly, flame color. Oz. 35c.

THOS. STEVENSON (S). Giant flame-colored Spencer. Oz. 50c.

Red Shades

AMERICA SPENCER (S). Bright red, striped and flaked on white. Oz. 35c.

GAIETY SPENCER (S). Bright rose-crimson striped and flaked on ivory white. Oz. 35c.

GEO. HERBERT (S). A large Spencer rose-crimson, suffused with magenta. Oz. 35c.

King Edward VII (G). One of the very best pure red shades. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

KING EDWARD SPENCER (S). The best pure red Spencer. Per pkt. 5c; oz. 35c.

MARIE CORELLI (S). Bright glowing crimson. Oz. 35c.

MAUD HOLMES (S). Mammoth wavy brilliant red. Oz. 35c.

Prince of Wales (G). Clear rose-crimson, self color; large and shell-shaped. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

Queen Alexandra (G). The nearest approach to a true scarlet. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

ROSABELLE (S). Very large and beautiful bright rose crimson. Per pkt. 15c.

SUNPROOF CRIMSON (S). Large red. Oz. 50c.

VERMILION BRILLIANT (S). Pure scarlet. Oz. 50c.

Lavender Shades

ASTA OHN (S). Soft, pinkish lavender self. Very large and wavy. Oz. 35c.

CHARLES FOSTER (S). Mauve-pink, a pastel shade. Pkt. 15c; oz. 60c.

DOBBIE'S LAVENDER GEORGE HERBERT (S). Fine lavender, color bluish lavender after standing in water.

FLORA NORTON SPENCER (S). Bright blue with tint of purple. Oz. 35c.

Lady Grisel Hamilton (G). Soft lavender, tinted with mauve in standard Per pkt. 5c; oz. 20c; ¼ lb. 50c.

LOYALTY (S). Bright blue striped on white. Oz. 50c.

MASTERPIECE (S). Large wavy lavender-tinted mauve. Oz. 35c.

Mrs. Chas. H. Totty (E. F.). Early lavender and shell-shaped. Oz. 25c; ¼ lb. 75c.

NEW MARGARET MADISON (S). Best light azure blue. Per pkt. 5c.

R. F. FELTON (S). Very large and beautiful lilac lavender. Per pkt. 15c.

WEDGWOOD (S). Larger than Zephyr; silvery blue. Per pkt. 5c; oz. 35c.

ZEPHYR (S). Silvery blue self, large and wavy. Oz. 30c.

Mauve and Purple Shades

AFTERGLOW (S). Violet blue and rosy amethyst Pkt. 15c; oz. 60c.

BERTRAND DEAL IMPROVED (S). Large rosy lilac. Oz. 35c.

FLORRIE (S). Pastel combination of magenta and purple.

MARKS TEY (S). Large rosy maroon, wings bluish mauve.

Mrs. Walter Wright (G). Rosy purple, self colored; large shell-shaped. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

Picotee Edged

BLUE PICOTEE (S). White with narrow edging of blue. Per pkt. 15c.

Lottie Eckford (G). White ground, shaded with lilac, and having a deeper border at edges. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

MRS. TOWNSEND (S). White with light blue edge. Oz. 50c.

Phenomenal (G). White ground, shaded blue and lavender, with edge of blue. Oz. 25c.

Blue and Purple Shades

CAPT. OF THE BLUES SPENCER (S). Clear purplish blue, lighter at edges. Oz. 35c.

Helen Pierce (G). Clear blue marbled on ivory white. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

HELEN PIERCE SPENCER (S). Marbled blue on white. Oz. 50c.

SENATOR SPENCER (S). Chocolate and brown striped, flaked on ivory white. Oz. 35c.

Deep Maroon, Purple and Blue Shades

Black Knight (G). Deep maroon, shade of a Black Tartarian cherry. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

Lord Nelson, or Brilliant Blue (G). A darker strain of "Navy Blue." Very dark. Per pkt. 5c; oz. 20c; ¼ lb. 50c.

NUBIAN (S). Largest and deepest maroon. Oz. 35c.

OTHELLO SPENCER (S). Deep rich maroon, very dark. Oz. 35c.

ROYAL PURPLE (S). Rich royal purple; strong grower, beautiful flowers. Oz. 50c.

Cupid or Dwarf Sweet Peas

These make a very pretty edging for a sidewalk or flower bed. The bright little flowers are borne in great profusion and make a very pleasing sight.

Pink—Color of Blanche Ferry, or rose standard, and white wings. Per pkt. 10c; oz. 35c; ¼ lb. $1.00; 1 lb. $3.25.

White—Pure white. Per pkt. 10c; oz. 35c; ¼ lb. $1.00; 1 lb. $3.25.

Mixture of all colors, including those listed and many more besides. Per pkt. 10c; oz. 35c; ¼ lb. $1.00; 1 lb. $3.50.

Mixed Sweet Peas

See Page 99 for Sweet Pea Mixtures.

Nursery Department

All orders for the following nursery stock will be filled and shipped by

THE VALLANCE NURSERY
81 Glen Avenue, Oakland, California

The Vallance Nursery represents Mr. John Vallance and Mr. James Vallance, both of whom have been associated with C. C. Morse & Co. for a number of years, and who have had the management of their Nursery Department since its organization as a department.

The very extensive seed business of our firm, and its constantly increasing development, necessitates our giving **Seeds** our undivided attention. The Nursery has therefore been separated from the other departments and sold to "The Vallance Nursery," who will use and operate our Nursery and Sales Yards at 81 Glen Avenue, Oakland, Cal.

We still solicit business for plants and trees, and under a contract arrangement "The Vallance Nursery" will fill and ship all orders for same.

Cash must accompany all orders and should be sent simply to C. C. Morse & Co., San Francisco, Cal.

GREENHOUSES and SALESYARD are situated on GLEN AVENUE, off Piedmont Avenue, OAKLAND, CAL. Visitors from San Francisco can reach there by taking the new Key Route Ferry (foot of Market Street) to PIEDMONT STATION; those from Oakland, by taking the Piedmont Avenue cars on Broadway to Glen Avenue. NURSERY TELEPHONE, PIEDMONT 30.

ORDERS. Customers will please remember that when the busy season commences the Nursery is rushed with orders, and it may be a few days before their orders can receive attention; but they may rest assured that there will be no unnecessary delay in shipping.

Prices quoted herein are f. o. b. cars, Nurseries, and cancel all previous quotations. As usual, 5 will be furnished at 10 rates; 50 at 100 rates; 500 at 1000 rates.

CLAIMS. Should any errors occur we desire to be informed upon receipt of goods, in order that we may rectify them without delay. All claims must be filed within ten days after the arrival of the shipments.

C. C. MORSE & CO. give no warranty, express or implied, as to description, purity, productiveness, or any other matter of any seeds, plants or trees they send out, and will be in no way responsible for the crop. If the purchaser does not accept the goods on these terms they are at once to be returned.

PACKING. Sufficient money should be added to remittance to cover cost of boxing, etc. Say 10 per cent of purchase.

SUBSTITUTION. Where particular varieties are ordered, and particular ages and sizes of trees, kinds of stock, etc., it should be stated whether and to what extent substitution will be allowed in case the order cannot be filled to the letter. Where no instructions in this respect accompany the order, we shall feel at liberty to substitute other varieties as nearly similar as possible. If the selection of varieties is left entirely to us we shall endeavor to send only such sorts as are acknowledged to give general satisfaction.

GUARANTEE. We do not guarantee stock to live, nor will we replace free of cost that which dies or fails to grow. We do guarantee, however, that all Nursery stock will be in good, live and healthy condition upon departure from the Nursery.

Landscape and Orchard Department. We will be pleased to supply plans for gardens, and we will also give advice to those who contemplate planting orchards. Twenty-five years' experience in this State in both departments enables us to do this.

Parcel Post. We advise customers not to order their plants by parcel post, unless absolutely necessary. Express rates are quite reasonable and shipments going in this manner arrive in better condition than by parcel post. However, if you are too far from express office we can send by parcel post; postage will have to be added.

THE ROSE

PLANTING

December, January, February and March are the best months, but should the season be favorable, and with a little extra care, you can still plant during the early part of April. The plants sent during those months are what we call dormant two-year-old plants, and average from one and a half to two and a half feet in height, and are taken up without soil around the roots, and are packed in damp moss. Should the purchaser be unable to plant them immediately, they will take no harm to remain in the packing for a few days, or they can be opened up and "heeled" in the ground until ready to set out. The bushes sent out are already pruned. Our plants are budded on the Manetti stocks; by so doing we can get a strong root for the rose; our "stocks" are always disbudded, but it sometimes happens that a sucker grow from the root; *planters should be careful to keep all suckers (if any), from BELOW the bud, cut away, otherwise the stock outgrows the rosebud itself.*

Roses give the best results when planted in good, heavy soil, to which may be added some good old stable manure, but remember that it ought to be well decayed. Under no circumstances use FRESH or new manure. After the hole is about three-quarters filled with soil, give some water to settle the earth around the roots; then put the remaining soil into the hole. This is usually enough water to give during the winter, provided we have not a long, dry period; in that case the plants should get another watering at regular intervals. They will commence to bloom the first season after planting, in May and June, and if properly treated, will give an abundance of flowers the first season. After the blooms are past, we advise you to cut the old flowers off; this treatment induces them to make new growth, from which you will obtain your next crop. To aid them at that time, keep them freely watered, and by so doing you can have flowers away into December.

ROSES IN POTS

We grow the leading varieties of roses in pots, so that if any of our customers are unable to get their planting done during the dormant months, they can purchase potted plants that can be set out at any time.

PRUNING

A few remarks on this important point are now necessary. This should be done during the months of January and February; at that time the bushes are in a dormant condition. The "Teas," or Ever-blooming Varieties, require to be more severely pruned than any other sort, as they are the strongest growers. Cut back to about six or seven inches from the old wood, thinning out all weak wood and leaving about five or six shoots, according to size of plant; apply the same method that the orchardist does to his fruit trees, and you will be about right. The idea is not to leave too much wood on the plant. If you follow this method you will have large roses with long stems. If you fail in pruning and thinning out, you will have a plethora of small blooms.

THE HYBRID TEAS should have almost as much pruning done to them as the TEAS.

HYBRID PERPETUAL sorts, not being such strong growers nor making so much wood as the preceding, do not require so much pruning.

NOISETTE or CHAMPNEY varieties being all climbers, and strong, rampant growers, are not usually pruned as their duties are to cover certain objects. They should, however, be periodically thinned out.

BOURBON sorts should be pruned according to the growth they have made.

MOSS ROSES require little pruning, as they usually make only a few shoots in a season. Just cut back to keep the plants in shape.

SOIL AND POSITION

There are few places in the garden where the rose will not succeed. Our California soil is pre-eminently adapted for the health of the rose, and sunlight we have to our heart's content; only, bear in mind, do not plant your roses in a too shady place, and if your soil is sandy, add a quantity of loam and old manure to enrich it, as the rose delights in good heavy rich soil.

WATERING

The best way to do this is to dig a ditch around your bushes and run the water into it, afterward putting back the dry soil; by this means the water gets to the roots. Avoid surface watering, which in a great many cases never reaches the roots, and only tends to bake and harden the surface. Better one GOOD WATERING once a week than SPRINKLING them every day. Occasionally spray them overhead at night to keep the foliage free from dust. You can also give them during the summer months liquid cow manure every two or three weeks.

DISEASES

You must not expect in the genial climate of California to have your roses entirely free from insects, but they are few and easily controlled.

APHIS, or GREEN FLY, is a small green louse, appearing on the young, tender shoots and buds. They are very prolific in breeding. Through their tender beak they suck the juices of the plants, always working at the tender shoots, and will in a short time, if unmolested, destroy the vigor and vitality of any plant they infest. REMEDIES: "Black Leaf 40" is the best remedy (see Insecticides).

MILDEW. When your plants become covered with a whitish-looking mould or dust, the disease is Mildew. Unless a very severe attack, it will probably not kill them, but retard their growth. It is caused, we believe, by sudden atmospheric changes and is generally worse in the spring when the nights are cold and the days are warm. Some varieties are more susceptible to this than others. The best plan is NOT to wait until the disease appears but, "taking time by the forelock," dust them in the morning with powdered sulphur, or if the disease has made its appearance, syringe with a solution of sulphide of potassium.

ROSE SLUG. About the size of the common house fly, and comes from the ground in early spring. The best remedies are powdered white hellehore or a solution of whale oil soap.

ROSE BUG. Is of a grayish color, and about half an inch in length. It appears suddenly in early spring, and feeds upon the opening buds and flowers, which it prefers to the foliage, and seems to be more fond of white and light-colored flowers than of the darker colored ones. The best and really only cure is handpicking.

From the above, it will he noticed that the enemies of the rose are few, and really the only one which is at all troublesome is the Green Fly.

FORMS OF ROSES

In California there are only two forms of roses grown—the BUSH and TREE (or STANDARD ROSE). The former is (as the name indicates) of bush form, branching from the ground; the Tree Rose is budded on a stem of the wild rose 4 feet from the ground. Standard roses are usually preferred for planting on the lawn, as they are out of the way of the lawn-mower for one reason, and are certainly more showy for such places than the Bush Rose. To grow a Standard to salable size usually takes three years; hence the difference in price.

Do not confound our field-grown, two-year-old plants with those offered by many Eastern houses at a cheap rate. These are small pot-grown plants raised in greenhouses and consequently do not begin to compare with the outside grown.

ABBREVIATIONS IN FOLLOWING LIST

T. for Teas. H. T. for Hybrid Teas. P. for Polyantha, or Baby Roses. H. P. for Hybrid Perpetuals. N. for Noisette, or Champney. B. for Bourbon.

NEW ROSES OF GREAT MERIT

The plants that we offer are all two-year-old strong field grown.

BEAUTE DE LYON

The color is coral-red, slightly shaded with yellow, a most unique shade; the flower is large, full and globular; petals of great depth. Austrian Briar. **50c each.**

C. W. COWAN

This is a most welcome addition to this class. The color is warm carmine cerise; the blooms large, full, imbricated in form and very freely and continuously produced; petals of great substance, smooth and circular; growth vigorous and freely branching. Alike valuable for exhibition and decorative or garden purposes. Delicious tea rose perfume. (H. T.) **50c each.**

CLIMBING RICHMOND

In all respects, excepting growth, identical with the normal type. On account of its unique color and free-flowering habit this is the most valuable and important addition made to the climbing section for many years. (H. T.) **50c each.**

DUCHESS OF WESTMINSTER

Dainty clear rose-madder, blooms are very large, full and perfectly formed, with high-pointed center, beautifully smooth and massive petals; very sweetly perfumed; very free flowering. A truly grand variety for exhibition. (H. T.) **75c each.**

DUCHESS OF SUTHERLAND

A strikingly distinct and beautiful rose of decided merit, possessing great value both for exhibition purposes and garden decoration. The blooms are freely produced and are carried on rigid stems; they are large, full and conical; the petals are unusually large, massive, smooth and erect, building up a flower which is a whirl of delight, and possessing a delicious sweet-briar perfume. The color is certainly novel, viz: delicate, warm rose pink with lemon shading on the white base. The growth is erect and vigorous, with verdant olive-green foliage. A very charming rose. (H. T.) **50c each.**

JULIET

Outside of petals old gold, interior rich, rosy red, changing to deep rose as the flowers expand. A very distinct and attractive novelty. Austrian Briar. **50c each.**

General McArthur

GEORGE DICKSON

Produces huge blooms quite five inches across. The color is velvety black scarlet-crimson, with brilliant scarlet reflexed tips, with heavy and uniquely pure crimson-maroon veining on the reverse. (H. T.) **50c each.**

HENRY MUNCH

(Pink Druschki)

A sport from the favorite white rose, Frau K. Druschki. This variety produces its flowers in great profusion, for a long period. Silvery pink. A fine acquisition. Very strong in growth. **75c each.**

JOSEPH HILL

Pink, shaded salmon, outside of petals coppery-pink; a most superb shade; flowers large and double. One of the best of recent introduction. (H. T.) **75c each.**

JONKHEER J. L. MOCK

Carmine, changing to imperial pink. The blooms are large and highly perfumed. A novelty of distinct merit. (H. T.) **50c each.**

LADY GREENALL

Intense saffron orange, heavily zoned and overspread on deep creamy-white; the reflex of each petal is faintly but decidedly suffused with delicate coppery shell pink. Flowers large, perfectly finished with high-pointed center, deep shell-shaped petals. (H. T.) **50c each.**

LADY HILLINGDON

A cross of Papa Gontier and Mad Hoste. A grand rose for either pot work or garden decoration. Blooms continuously, buds very long with a most pleasing shade of orange yellow. Particularly fine in the bud state. (T.) **50c each.**

LADY BARHAM

Deep flesh, coral pink; enormous flowers of perfect globular shape, which are carried on stiff and erect flower stalks. The growth is very robust, with large, deep green foliage. Strongly tea-perfumed. (H. T.) **50c each.**

LIEUTENANT CHAURE

Velvety crimson-red; large; a grand bloomer; an excellent sort. (H. T.) **50c each.**

MABEL DREW

Deep cream in the young state, passing to intense canary-yellow in the center as the bloom develops; flowers large and full, with large, smooth, circular petals and delicious perfume. Gold medal, N. S. R. (H. T.) **50c each.**

MADAME CHARLES LUTAUD

Large, full and globular flower, fine long bud of a nice ochre yellow, carmined tint, carried on long flowerstalks. The progeny of an unnamed variety crossed with Marquise de Sinety. (H. T.) **75c each.**

MADAME MELANI SOUPERT

Salmon yellow, suffused carmine; buds long and pointed; when open the flowers resemble a semi-double paeony; a rose of most exquisite sweetness; a long and continuous bloomer. (H. T.) **75c each.**

MADAME HERRIOT

"Daily Mail Rose"

Coral red, shaded yellow at base, passing to shrimp red; a very beautiful combination of colors. **$1.00 each.**

MRS. A. R. WADDELL

Orange pink or reddish salmon. Outer petals flesh colored; a beautiful combination of coloring. Very free bloomer. (H. T.) **50c each.**

MRS. P. BLAIR

Chrome yellow; buds long and pointed; very free bloomer; a strong grower. (N. T.) **50c each.**

MRS. AARON WARD

Deep rich Indian yellow, occasionally tinted with salmon. A constant bloomer, with buds and open bloom of most refined form. (H. T.) **50c each.**

The Lyon Rose

MRS. SAM ROSS

A flower of the largest size and greatest refinement, a lovely and uncommon shade of color difficult to describe. It may be said to shade from pale straw color to light chamois-yellow, with a distinct flush of buff on the reverse of petals. Gold Medal N. R. S. **$1.00 each.**

OPHELIA

Salmon flesh, shaded rose, center of flower showing pronounced coloring of chamois; buds long and pointed; very free in bloom. (N. T.) **$1.00 each.**

RAYON D'OR

Yellow cadmium as the bloom begins to open, toning to sunflower yellow when fully expanded. Fine bronze-green foliage, glossy and immune from attacks of mildew. (H. T.) **75c each.**

SILVER MOON

A grand new climbing rose of very strong, rampant growth; foliage very glossy; beautiful creamy white flowers, in clusters. **Field grown, 50c each; $4.00 per 12.**

SUNBURST

Flowers large, fairly full and of nice elongated cupped form; the coloring is a superb cadmium yellow-orange center. (H. T.) **50c each.**

VERNA MACKAY

Color ivory sulphur buff, changing to brilliant lemon as the flower expands; very free and perpetual. (H. T.) **50c each.**

BEST ROSES OF RECENT INTRODUCTION

Price 50c each; $4.50 per doz.; 2-year-old field grown.

BETTY (H. T.)—Ruddy gold, overspread with golden yellow; flowers large, fairly double, fine form; buds very long, pointed, very large petals; deliciously perfumed.

CLIMBING BELLE SIEBRECHT (H. T.)—A climbing sort of the old favorite bush variety; buds long and pointed; beautiful shade of pink.

CLIMBING WHITE COCHET (T.)—The "Cochets" are famous for their wonderful wealth of bloom; we are pleased to have a climbing variety to offer.

COUNTESS OF GOSFORD (H. T.)—Lovely shade of pink; flowers produced very freely.

DEAN HOLE (H. T.)—Silvery carmine, shaded salmon; very large full flowers, with high center.

DOROTHY PERKINS—Flowers borne in large clusters; clear shell pink; a vigorous climber.

DR. CAMPBELL HALL (H. T.)—Coral rose, suffused white, base of petals yellow; the flowers are large, full and perfectly formed; very floriferous.

FLORENCE PEMBERTON (H. T.)—Creamy white shaded rose, petals bordered rose salmon, flowers large.

FLOWER OF FAIRFIELD (Polyantha).—Brilliant crimson; blooms in the greatest profusion.

GENERAL McARTHUR (H. T.)—Dazzling crimson scarlet; buds of ideal shape and exquisite perfume; foliage beautiful; a strong, thrifty grower.

HARRY KIRK (H. T.)—Deep sulphur-yellow, changing to a lighter shade of yellow at the edges of the petals.

HIS MAJESTY (H. T.)—A rich dark crimson, shaded deep vermilion; beautiful in bud and when full blown.

HONORABLE INA BINGHAM (H. T.)—A matchless pink of most charming tone, beautifully veined; the flowers are semi-double; petals very large.

HUGH DICKSON (H. P.)—A brilliant velvety crimson, shaded scarlet; bud long and pointed.

KATE MOULTON (T.)—A variety that will meet with favor with all rose lovers. It is a beautiful clear pink, the edges (which are prettily recurved) are tipped white, this combination being rarely seen in a rose.

LADY ASHTOWN (T.)—Very pale rose; buds large, full and pointed; excellent.

LADY BATTERSEA (Red Niphetos) (H. T.)—Beautiful cherry-crimson; buds long and pointed.

LYON ROSE (H. T.)—One of the judges who awarded the gold medal to this rose says, "I have no hesitation in recommending it as the most wonderful color yet obtained among roses. This may be best compared to the intense flame color seen in a glowing coke furnace."

MELODY (H. T.)—A most floriferous bloomer, continuing for a very long period. The blooms are carried on erect stems and are of good size; the buds are of beautiful formation, long and pointed; color, pure deep canary yellow, with primrose edges.

MRS. ALFRED TATE (H. T.)—Coppery-red, shaded fawn, buds long and perfectly formed with grand petals.

MRS. MYLES KENNEDY (T.)—Delicate silvery white shaded buff; while the center is pink, the reverse of the petals is a slightly deeper shade of pink.

MILDRED GRANT—Petals shaded and bordered pink; of enormous size.

MY MARYLAND (H. T.)—A most pleasing pink, a similar shade that can be seen in the "Lyon."

RAMONA (Red Cherokee)—Flowers single; foliage leathery; a strong climber.

SINGLE PINK CHEROKEE—In all respects similar to the beautiful White Cherokee, but pink in color.

WHITE KILLARNEY (H. T.)—A pure white sport of the favorite pink Rose of Killarney.

WM. SHAEN (H. T.)—Purest pink, petals shell shaped, four to five inches long; a glorious rose of immense size.

ROSES, CHOICE ASSORTMENT

Price, two-year-old plants, 35c each; $3.50 per dozen.

AMERICAN BEAUTY (H. P.)—Large, globular, deep pink, shaded carmine, delicious odor.

AUGUSTINE GUINOISSEAU (White La France) (H. T.)—Pure white, shading to a center of light rose.

AURORA (T.)—Pink of deep hue; very free.

BANKSIA (White and Yellow)—The well-known thornless climbing roses.

BEAUTY OF GLAZENWOOD—A combination of copper, carmine and salmon-yellow; a strong, fast climber.

BELLE SIEBRECHT (H. T.)—A superb pink; buds are long and pointed.

BRIDE (T.)—An everblooming pure white; buds pointed and the ends of the petals slightly recurved.

BRIDESMAID (T.)—Pink; buds and flowers very double.

CAPTAIN CHRISTY (H. P.)—Delicate flesh color, rosy center; flowers extra large and sweetly scented.

CAROLINE TESTOUT (H. T.)—Of La France type, but a bright, clear, delicate pink.

CECILE BRUNER (P.)—A charming "Baby" variety; color salmon-pink, with deep salmon center.

CHEROKEE (Single)—One of the finest pillar roses in cultivation; large, clear white, single flowers.

CLIMBING BRIDESMAID—A rich shade of velvety pink; buds exquisite; stems long and stiff.

CLIMBING CAROLINE TESTOUT—An exact counterpart in color and shape of that old favorite, Caroline Testout.

CLIMBING CECILE BRUNER—Same as that of the bush form in all respects.

CLIMBING KAISERIN AUGUSTA VICTORIA (T.)—Buds long and pointed, pure white; a rapid grower.

CLIMBING PAPA GONTIER—Buds are long and pointed and of deep-red color; a free and continuous bloomer.

CLIMBING PERLE DES JARDINS (T.)—Habit of growth is vigorous; the flowers are produced in profusion and are deep canary-yellow.

CLOTH OF GOLD (N.)—Deep yellow center, sulphur color edges; a good climber.

DR. GRILL (T.)—Clear buff pink, passing to clear rose and fawn; most desirable; always in bloom.

EMPEROR OF MOROCCO (H. P.)—An intensely dark rose, of velvety maroon.

FRAU KARL DRUSCHKI (H. P.)—Pure snow-white; very long buds; shell-shaped petals, opening to very large flowers; the finest white rose in cultivation.

GENERAL JACQUEMINOT (H. P.)—Rich, velvety crimson, changing to scarlet crimson. A magnificent rose.

GLOIRE DE DIJON (T.)—A combination of rose, salmon and yellow; flowers very large and full; a good climber.

GLOIRE DE MARGOTTIN (H. P.)—Brilliant shade of red; buds large and pointed; a free and continuous bloomer; a splendid pillar rose.

GRUSS AN TEPLITZ (Climbing Hermosa)—Velvety scarlet and continually in bloom.

IRISH ELEGANCE—Apricot, shaded coppery-bronze at base of petals, flowers single.

KAISERIN AUGUSTA VICTORIA (T.)—Full flowers; magnificent in bud; stems long; pure white.

LA FRANCE (H. T.)—Delicate silvery rose, shaded with cerise pink, often silvery pink, with peach shading.

LA FRANCE OF '89 (H. T.)—Long, elegant buds, approaching scarlet; of sweet fragrance; continuous bloomer.

LA MARQUE (N.)—Pure white buds, open flowers tinged light canary-yellow; large and full; a grand climber.

LIBERTY (H. T.)—Crimson scarlet; very free.

MAHARAJAH—Deep velvety crimson, with prominent yellow anthers; large and beautiful.

MADAME A. CARRIERE (N.)—Rich, creamy white.

MAD. C. GUINOSSEAU (T.)—Clear canary yellow; buds elegant.

MAMAN COCHET PINK (T.)—Deep pink; buds long and pointed, of great substance; a continuous bloomer.

MAMAN COCHET WHITE (T.)—Buds faintly suffused with pink on outside petals; foliage glossy.

MAMAN COCHET YELLOW (T.)—Like the other "Cochets," very large and continuously in blossom.

MARECHAL NIEL (N.)—Beautiful deep yellow and of globular form. A good pillar rose.

MARIE VAN HOUTTE (T.)—White, slightly tinged with yellow; free grower and fine bloomer. Exquisite.

PAPA GONTIER (T.)—Bright cherry red, passing to rich, glowing crimson; petals shaded with yellow.

PAUL NEYRON (H. P.)—Clear pink; one of the largest roses grown.

PERLE D'OR (Poly)—Saffron yellow; very beautiful.

PERLE DES JARDINS (T.)—Fine straw yellow; sometimes deep canary yellow; very large and full.

PRINCE CAMILE DE ROHAN (H. P.)—Rich, dark, velvety crimson, changing to scarlet maroon; full and double.

RAINBOW (T.)—Deep coral pink, beautifully striped and mottled with intense glowing crimson.

REINE MARIE HENRIETTA—Red; climber.

REVE D'OR (Climbing Safrano) (N.)—Deep yellow, sometimes coppery-yellow or rosy buff.

ROSE OF KILLARNEY—A glistening soft silvery pink, petals waxy in appearance; buds long and pointed.

SAFRANO (T.)—Buff apricot; a constant and profuse bloomer; one of the old favorites.

SOUV. DE PRES. CARNOT (H. T.)—Flesh color; very free in bloom.

SUNSET (T.)—Color, rich saffron and orange.

ULRICH BRUNER (H. P.)—Bright, clear red; a profuse bloomer and hardy grower.

WILLIAM ALLEN RICHARDSON (N.)—Fine orange yellow, apricot center; a beautiful climber.

STANDARD ROSES

We can supply the following roses in standard or tree form; that is, they are budded on single stems, four to four and one-half feet from the ground. $1.25 each.

Betty	**Mad. C. Testout**	**Prince of Bulgaria**
Frau K. Druschki	**Papa Gontier**	**Rhea Reid**
Lyon	**Gen. McArthur**	**Sunburst**
K. A. Victoria	**Pink Cochet**	**Ulrich Bruner**
	Perle des Jardins	

DAHLIAS

Dahlias can be set out in February and as late as July. A good plan is to keep setting them out at intervals so that you will not have them blooming all at one time. Bulbs, and what are called "Green Plants," can be used (and will bloom just as freely as Bulbs); the former are ready for delivery from January and the latter about May. Dahlias are of the easiest culture. They succeed best in light soil and require plenty water. "Disbudding" is practiced by those desiring extra large flowers.

Dahlias are classified as follows:

CACTUS. These sorts have long petals, sometimes coming in irregular shapes, putting one in mind of the Chrysanthemum flower. They are all very free in bloom and are very valuable for cutting, their many beautiful colors being very generally admired; for a small amount of labor we know of no flower that will give such returns.

DECORATIVE. These were originally classified as Cactus sorts, as the blooms resembled those of the Cactus plant, but as the previous type was developed this class was re-named Decorative.

SHOW. This is the original type of Dahlia; the blooms are large, globe-shaped, and most regular in form.

PAEONY FLOWERED. This new type of Dahlia has been received with a great deal of pleasure by the plant-loving community. They have large flowers with, as a rule, two rows of petals, somewhat ragged in appearance, producing their flowers in wonderful profusion, and for a long period.

COLLARETTE. Is a type of single Dahlia, which has produced a sensation wherever shown. The peculiarity of the type lies in the development of the four stamens into short rows at the base petals, which forms a frill or collar around the center.

Cactus Dahlia

NEWEST AND BEST SORTS

Price (except where otherwise noted) 35c each, $3.50 per dozen.

C. stands for Cactus. P. F., Paeony Flowered. D., Decorative. S., Show. Col., Collarette.

ALICE ROOSEVELT. (D.) White-shaded lilac.

CALIFORNIA. (C.) Most vivid scarlet; good stiff stems.

CAESAR. (P. F.) Excellent yellow; exceedingly free in bloom. (Green plants only.)

COLONEL WOOLSEY. (P. F.) White suffused pink.

CAPTAIN CURTIS. (C.) A very fine fiery red.

EDITH CARTER. (D.) Yellow passing to bright rose, an elegant sort.

GEISHA. (P. F.) Yellow suffused and streaked with red; **50c each.**

GOLDEN EAGLE. (C.) Bright yellow with suffusions of rose and fawn.

HIGH SHERIFF. (P. F.) Scarlet. Green plants only.

IRRESISTIBLE. (C.) Yellow suffused rose; stems excellent.

JOHN RIDING. (C.) Bright orange scarlet with long claw-shaped florets incurving over the center.

JOHN WANAMAKER. (P. F.) Beautiful shade of lavender; petals crimpled; very free.

KALIFF. (C.) "Beef steak" red.

LE GRAND MANITOU. (D.) White ground splashed and striped deep violet red. Green plants only.

LIBERTY. (P. F.) Bronze orange scarlet; unique and lovely. **50c each.**

LADY DUDLEY. (C.) Rich rose red; best pink cactus.

LADY SAVILLE. (P. F.) Old gold, interspersed brick red; beautiful.

MARY PURRIER. (C.) Crimson-scarlet; of very large size; one of the best.

MAD. AYMARD. (D.) A unique shade, with heliotrope blendings.

MAUVE QUEEN. (C.) Delicate shade lavender; exceedingly free.

MRS. STEPHENS. (P. F.) Yellow suffused pink.

MONTROSE. (D.) Delicate pink; very free.

MISS STREDWICK. (C.) Soft yellow at base, changing to deep pink.

NANTWICH. (C.) A beautiful shade of golden yellow, shaded amber; incurved petals. **50c each.**

PHENOMINE. (D.) Beautiful shade of salmon; exquisite.

PEGASUS. (C.) Bright rose, spotted and splashed crimson; florets elegantly curved. **50c each.**

RICHARD BOX. (C.) Soft yellow, long incurving florets.

SEABRIGHT. (D.) Coppery buff; very free; excellent.

SEMIRAMIS. (P. F.) Light lilac, beautifully blended metallic hue; exquisite and free.

TORPILLE. (D.) Bright rosy red.

TENOR ALVAREZ. (D.) Ground rose, striped and speckled crimson.

WODAN. (P. F.) A unique shade, bronzy pink.

"Green Plants" Ready May.

CACTUS VARIETIES

Price of all the following varieties in bulbs, 30c each; $2.50 per dozen.

BRITTANIA. Delicate shade of soft salmon pink, blended apricot, petals long and twisted.

COUNTESS OF LONSDALE. Rich salmon-tinted apricot at base of petals; carmine pink toward the tips, stems long and stiff.

COMET. A grand "fancy cactus," the ground color silvery rose, speckled with crimson.

C. E. WILKENS. Salmon pink on fawn deeper at the points of the flower.

DREADNAUGHT. Glowing crimson, deepening to maroon in the center; very long, curving florets; flowers of great size, grand form.

DOROTHY VERNON. Flesh, shading through maple to cameo.

ELSE ELLRICK. Pearly white, shaded mauve; good form; a very pleasing variety.

FLAG OF TRUCE. Pure white, florets long and of exquisite form.

FLORRIE WELLS. Combination of crimson and purple, a finely formed flower, with stiff straight pointed petals.

GOOD HOPE. Deep cardinal red, florets long and twisted; tipped white; very good.

HILDA SHOEBRIDGE. Beautiful rich salmon, of large size with grand petals, a very free bloomer.

INNOVATION. Reddish scarlet, ends of petals tipped white, very fine.

J. W. BAGGE. Bright radiant scarlet orange; a lovely shade.

JUPITER. Yellow shading to flesh pink, heavily striped crimson; a fancy cactus of good form and great excellence.

J. H. JACKSON. Deep dark velvety maroon; of best cactus form; stems good; pretty hard to beat.

JOHANNESBERG. Bright gold color; florets good; a very attractive sort.

LUCIFER. Orange and old gold; petals long, narrow and twisted.

MRS. STEPHENS. Pale yellow passing to a deeper shade in the center; a highly finished flower.

MRS. MAWLEY. A very fine yellow, of true cactus form; flowers produced on fine long stems; deep canary yellow.

WM. JOWETT. Deep cardinal red; perfect cactus form, every petal quilled; very large, stems long and stiff.

WM. MARSHALL. Light bronze-yellow; florets long and refined.

DECORATIVE VARIETIES

BEACON. A grand striking rich orange-colored Dahlia; flowers perfect.

DELICE. A beautiful shade of pink, flowers produced on long, stiff stems, and in great profusion; for cutting cannot be beat; it is a fine keeper.

MADAM VAN DEN DAEL. A grand variety of large size, beautiful form; color velvety white, shaded pink on outer petals.

MINNIE BURGLE. Brilliant scarlet; fine form, large size, with long, stiff stem, and an excellent keeper; admitted to be the best scarlet.

MRS. KETTLEWELL. A unique shade of scarlet, much admired, a fine bloomer, good stems and excellent keeper.

PRINCESS JULIANA. Pure white, flowers freely produced on long, stiff stems; a first class variety.

PERLE DE LA TETE D'OR. Pure white flowers, borne on long stiff stems; very fine.

QUEEN MARY. Pure velvety pink, outer petals tinged white; a free bloomer; stems good; a most florif-erous sort and bound to be valuable as a commercial variety.

SOUVENIR DE G. DOUZAN. Brilliant orange-red; of immense size.

SANTA CRUZ. Straw colored petals; edges beautifully tipped pink; green plants only.

WINSOME. Pure white, of excellent form; stems good; fine keeper.

YELLOW COLOSSE. Deep canary yellow; flower of very large size; a most excellent sort.

SHOW VARIETIES

A. M. BURNIE. Dark orange ground, lightening to yellow toward edge of petals; of fine form.
CLARET CUP. Purple deepening to purplish crimson at base of petals; of splendid shape.
COLONIST. Chocolate and fawn, a very unique color.
ESMOND. Rich, deep yellow.
JAMES CROCKER. Purple; large, very fine.
MRS. JOHN WALKER. Pure white; of great size.
STANDARD. Chocolate faintly tipped yellow, center high and solid.

PAEONY FLOWERED VARIETIES

CODSALL GEM. Deep yellow at base of petals, shading to primrose at the edges of the florets.
FRAU A. GALSTER. Amber yellow tinted with red; plant of dwarf habit; very free in bloom.
GLORY DE BAARN. Flowers large, light rosy pink; very free flowering.
LADYSMITH. Violet rose; flowers very large; carried on good stiff stems.
MAFEKING. Fawn color suffused rose, a very beautiful blending.
PIUS X. Large bright yellow.
PRETORIA. Rose streaked and mottled with crimson, yellow tinge near the center; flowers very large with good stem.
QUEEN WILHELMINA. Pure white, of great size; a charming sort.
STELLA MARIS. Crimson-scarlet tipped with white, sometimes flowers come solid crimson.

COLLARETTE VARIETIES

HOLYROOD. Ruby color, tipped gold, yellow collar.
PRINCESS LOUISE. Rich glowing crimson, with broad petals with white collarette.
TUSKAR. Rosy crimson tipped with rose and white, straw colored collarette.
SKERRYMORE. Bright scarlet tipped golden yellow, yellow collarette, a fine combination.

SINGLE VARIETIES

CRIMSON PRINCE. Crimson-scarlet, of splendid form; one of the best.
VERONIQUE. Clear yellow, striped with bright scarlet; flowers large and of fine form.

Group of Chrysanthemums

CHRYSANTHEMUMS

To obtain large flowers of this beautiful fall flower it is necessary that especial care and culture be given them. Young plants must be obtained; one shoot is allowed to grow and all side growth is kept nipped off, so that the strength be allowed to go into the main stem. The plant is kept growing in this manner, but should a flower bud appear on the end of the stalk before the date set (at the end of description of each variety) this also must be nipped away. For instance, we will take the "Mrs. Heume" as an example. The date is August 20th, but should a flower bud appear say about July 20th, this must not be allowed to grow, but taken away, and a new bud will follow which ought to be about the size of a pea by August 20th; then all attention must be given this bud, and the plant be kept liberally fed with manure and bone meal applications. If the bud which had formed, we will say July 20th, had been allowed to grow, the flower would have been much inferior to that bud "taken" at correct date, namely, August 20th. This will explain, we think, the meaning of the dates after each variety. Of course, judgment will have to be used; for instance, should a bud appear two weeks before date, then it would be as well to leave that one. The best planting time is during April and May.

Chrysanthemums should be protected with cheese-cloth a few weeks before blooming time. These few remarks may help the novice in the growing of this plant. To obtain large flowers, it requires a good deal of experience, and it may take quite a few trials before success is attained.

Plants from 3-inch pots at 15c each; $1.50 per dozen, of the following choice sorts. Not ready until April:

CLEMENTINE TAUSET. A splendid early white (August 15th).

CHRYSOLORA. A commercial, yellow, incurved variety; comes between Major Bonnaffon and Col. Appleton. Good stem and foliage. Take bud about August 1st to 10th.

COLONEL APPLETON. Golden yellow; Japanese Incurved; one of the best; late bloomer. (Sept. 15.)

DR. ENGUEHARDT. A good commercial pink, double from center; stem and foliage extra good. (Sept. 15.)

F. S. VALLIS. A very large yellow; narrow twisted petals; attracts much attention wherever seen. (Aug. 20.)

F. T. QUITTENTON. A magnificent crimson for exhibition; every petal reflexed. (August 25th.)

GLENVIEW. A large Japanese incurved variety; a unique shade of brown. (Sept. 10.)

HORTENSE TELASMUS. Old gold, shaded reddish bronze; habit ideal. (August 10th.)

JEANNIE NONIN. A good late white variety; large incurved flowers. (Oct. 5.)

LADY HOPETOWN. Light pink; one of the finest; produces large, finely formed blooms. (Sept. 1.)

LYNWOOD HALL. Pure white; very large; perfectly incurved. (August 15th.)

MRS. H. J. JONES. Glistening white; large incurved. (Sept. 15.)

MRS. GEO. H. HEUME. Color unique salmon bronze; outer petals reflexed; center incurved and forms blooms of great depth. (Aug. 20.)

MRS. H. ROBINSON. Incurved white; good stem and foliage. (Aug. 15.)

MAJOR BONNAFON. The most widely grown of yellow sorts for commercial purposes. (Sept. 10.)

PORTOLA. Terra cotta, reverse of petals old gold; incurved; very fine. (Sept. 5.)

POCKETT'S CRIMSON. The largest thing of its color ever sent out. Crimson with a gold reverse. (Aug. 25.)

WELLS' LATE. One of the finest late lavender pinks. (Sept. 10.)

WM. TURNER. The best white ever introduced; makes a perfect ball of the purest white.

CANNAS—Newest and Best Sorts

25c each; $2.50 per dozen.

Cannas delight in a warm spot in the garden, where when supplied liberally with water, they bloom for a long period. A bed of these will be a source of great pleasure to those who may plant. We know of no other plant that produces such a wealth of bloom. The varieties that have been introduced in late years are great improvements over the old sorts.

CORONET. Yellow.

GLADIATOR. Yellow, speckled red.

GLADIOFLORA. Crimson changing to carmine-rose; petals edged gold.

HALEY'S COMET. Blazing scarlet, throat pure yellow with a narrow rim of yellow around the petal; foliage green.

KING HUMBERT. Orange-scarlet, with red shadings; foliage bronze.

MRS. CARL KELSEY. Beautiful suffusion of scarlet, rose and gold. Green foliage, edged purple.

VENUS. Warm rose-pink mottled near center and edged creamy white; green leaved.

WAMA. Rosy flesh-pink; very free in bloom; of dwarf habit.

CARNATIONS

3-inch pot plants, 15c each; $1.50 per dozen.

ALICE. Flesh pink; free bloomer; sweetly scented.

BENORA. White; streaked and splashed pink.

EL DORADO. Yellow.

ENCHANTRESS. Blush pink.

MATCHLESS. Pure white, of excellent form; long stemmed and free flowering; petals fringed.

MRS. W. WARD. Deep pink.

PRINCESS DAGMAR. Crimson; flowers large; stems long and stiff; rich fragrance; an excellent new sort.

ROSE PINK ENCHANTRESS.

VICTORY. Brilliant scarlet.

WHITE ENCHANTRESS. A very good white sort.

FUCHSIAS

4-inch pots, 30c each; $3.00 per dozen.

The old-fashioned Fuchsia has been much neglected of late years but is now coming back into favor again. They are very satisfactory in a shady place, and when trained against a wall, very soon assume great beauty; they are also very desirable for cutting as they are very decorative.

ABBE FARGES. Extremely double. Sepals very much reflexed. Corolla reddish violet. Giant in size.

BLACK PRINCE. Purple; double.

DIAMANT. A grand double variety. Sepals clear rose; coralla rose and white.

EMILE LAURENT. A very free blooming variety. Sepals clear rose; corolla rose and white; double.

ELSA. Sepals white blush pink; corolla deep pink; single; exquisite.

GEROLSTEIN. Sepals white; corolla blush pink; single; tall grower.

G. PORTESI. Double. Corolla violet blue, veined with scarlet blue, veined with scarlet at the base of the petals. Sepals scarlet. A superb variety.

JARRY DESLOGES. Sepals clear red; corolla enormous. White, with rosy carmine at the base. A superb variety; double.

PHENOMENAL. Large double purple.

PYTHAGORE. Sepals dark coral red; corolla very double and spreading. Rich violet in color. Extra fine and large; double.

PROCUMBENS. Small foliage; of creeping habit.

RICORTIANA. Very small flowers; a miniature variety.

RENAULT MORLIERE. Sepals broad and reflexed. Corolla deep prune color. Very large flowered; double.

STORM KING. Double white.

SYLVIA. Calyx scarlet. Corolla giant in size and pure white in color. Beautifully formed flower; double.

TORPILLEUR. Sepals intense red; giant double corolla. Color flesh, shaded rose. Extra fine; double.

YELLOW SWARLEY. Single; orange.

GERANIUMS

Price of plants from 3-inch pots, 15c each; $1.50 per dozen.

JEAN VIAUD. Soft, pure pink, with two white blotches; dwarf-stocky grower, rigid stems, large trusses, perfect florets; semi-double.
CERISE. Rose, suffused orange; large, of perfect shape and very free in bloom; single.
GERTRUDE PEARSON. Rosy pink, white eye; one of the best; single.
JOHN FORBES. A very fine single scarlet.
MRS. GLADSTONE. Very pale pink; single.
NEWSOM. A beautiful single scarlet, shading to red; immense trusses and very free flowering.
S. A. NUTT. The very best of the double dark crimson scarlets.
THE CLYDE. An immense single scarlet; trusses very fine. Extra strong grower.
THE SWAN. A grand double white variety, constantly in bloom.

IVY-LEAFED GERANIUMS

Are indispensable for covering banks, fences, etc. They are almost continuously in bloom, and require very little water.
CHARLES TURNER. The color is a bright pink, quite double. Very useful for window boxes and rockeries.
CARLOS UHDEN. A magnificent new variety, quite double; color rosy scarlet; grand for window boxes and banks; always in bloom.

PELARGONIUMS

Lady Washington Geranium

THE FOLLOWING ARE SOME VERY FINE NEW SORTS THAT WE CAN HIGHLY RECOMMEND. They produce immense flowers and trusses.
4-inch pots, 35c each; $3.50 per dozen.
ANDENKEN AN LONDON. Enormous, round scarlet red flowers, with a distinct white center; the two upper petals blotched with black.
CARL HOLZMAN. Scarlet, with a light colored center, upper petals penciled and spotted black.
ERBPRINZESSEN YSENBURG. Light red, center white, with white edging to the petals, and dots of white over their entire surface. A unique sort.
FRAU KRUMB. Petals beautifully fringed and undulated; color pale soft rose, with upper petals blotched deep purplish red.
MISS SAUNDERS. A magnificent pure white with the two upper petals broadly blotched with purplish crimson; blooms very large.
PAULINE SCHROETER. Deep rosy carmine, with white eye; upper petals darkly blotched.
PETER HOSER. Fiery brick red with black blotches on each of the five petals.
SCHONE ILLA. Salmon rose, with dark blotches in the upper petals. A very pleasing shade.

THE FOLLOWING PELARGONIUMS 25c each; $2.50 per dozen.
DUKE OF ALBANY. Deep, rich crimson-maroon, margined with rosy lake; light center, surrounded with violet, rose shading.
DUCHESS OF TECK. Very large trusses of extra large semi-double white flowers; petals undulated and frilled.
MABEL. Upper petals brilliant dark maroon, under petals soft rosy pink; large white center.
MADAME THIEBAUD. Blotched and marbled rose and white ground; upper petals marked with crimson-maroon; large white center; edges of petals also white.
MILTON. Upper petals grandly blotched dark maroon, surrounded with bright crimson and edged with rose; lower petals of soft pink, feathered with crimson; light center.

VIOLETS

CALIFORNIA. Large, single blue. **60c per dozen.**
MARIE LOUISE. The well-known double light purple variety. **75c per dozen.**
PRINCESS OF WALES. Very large flowers, violet blue; single, sweetly scented; stems long; very free in bloom. **60c per dozen.**

CLIMBING AND TRAILING PLANTS

AMPELOPSIS ENGELMANNI. Shorter jointed than quinquefolia. Strong grower. **35c and 50c each.**
AMPELOPSIS QUINQUEFOLIA (Virginia Creeper). The leaves are palmate, handsome and luxuriant, assuming in autumn a gorgeous bronzy hue. **35c and 50c each.**
AMPELOPSIS VEITCHII (Boston or Japan Ivy). This variety clings closely without any assistance to a stone wall or brick flue, or a wooden surface. **Strong plants, 50c each; $4.00 per 10. Smaller 25c each; $2.00 per 10.**
AUSTRALIAN PEA VINE. This lovely fast-growing climber we can recommend to those desiring a rapid grower. The flowers are pea-shaped, pink, and produced in great luxuriance. **Pot grown, 35c and 50c each.**
BOSTON IVY. See Ampelopsis Veitchii.

CLEMATIS

75c each except where noted.

DUCHESS OF EDINBURGH. Fine large double white.
JACKMANII. Deep purple violet.
HENRYII. Large, single white.
MONTANA. The flowers are produced in spring in wonderful profusion; they are about the size of a dollar and are pure white. The vine is a rapid, rampant grower. **50c each.**
CLEMATIS MONTANA PINK. A new, very desirable sort.
PANICULATA. A Japanese climber, recently introduced into this country, of unusual and attractive merits; rapid grower. **35c each.**

BOUGAINVILLEA BRAZILIENSIS. Have peculiarly shaped flowers, somewhat resembling the leaves in shape, the color being of a rosy lake, and produced along the branches in wonderful profusion. **65c and $1.00 each.**
BIGNONIA GRANDIFLORA (Trumpet Vine). Rapid-growing climber, bearing large orange-yellow trumpet-shaped flowers in great profusion. **6-inch pots, 50c each; $4.00 per 10.**
CLIANTHUS PUNICEUS. "Parrot's Bill." Flowers scarlet; shaped like a parrot's bill; a rapid grower. **4-inch pots, 35c each.**
FICUS REPENS. A very pretty useful climber; clings to stone, brick or wood; like the Boston Ivy. Evergreen. **25c each and 35c each.**
HONEYSUCKLE, CHINESE. Rosy white; very sweetly scented. **35c each.**
HONEYSUCKLE, HALLEANA. A strong, vigorous, almost evergreen sort, with pure white flowers, changing to yellow; very fragrant; a long and continuous bloomer. **25c and 35c each.**

The Wisteria is of very rapid growth

CLIMBING AND TRAILING PLANTS—Continued.

IVY, ENGLISH, LARGE-LEAVED. Leaves thick, shining, leathery. **5-inch pots, 35c each; $3.00 per 10.**

IVY, CUT-LEAVED. **4-inch pots, 35c each.**

IVY, VARIEGATED, SILVER-LEAVED. **4-inch pots, 35c each.**

JASMINE NUDIFLORUM. This variety of Jasmine produces its lovely fragrant yellow flowers in very early spring in great profusion. **25c and 35c each.**

JASMINE OFFICIONALIS. Single white flowers produced continuously; very sweet; vine strong and rapid grower. **4-inch pots, 35c each.**

JASMINE PRIMULINUM. A grand new golden yellow variety, introduced from China; the blossoms are fully two inches in diameter, and in early spring-time the plant is one mass of blooms. **25c and 50c each.**

JASMINE REVOLUTUM (Yellow-Flowering Jasmine). Produces fragrant yellow flowers. **4-inch pots, 35c each; $3.00 per 10.**

KENILWORTH IVY. An old-fashioned favorite; excellent for window boxes and hanging baskets. **4-inch pots, 20c each.**

LOTUS PELIORYNCHUS. A dainty plant of creeping habit; foliage glaucous, lace-like; flowers scarlet. **3-inch pots, 20c each; $1.50 per 10. Large, 50c each.**

MUEHLENBECKIA COMPLEXA (New Zealand Mattress Vine). This pretty, strong-growing climber and trailer is very desirable for covering old stumps of trees, rockwork, etc. The foliage is small, dense and graceful. **15c, 25c and 35c each.**

PASSION VINE (Passiflora). These well-known, hardy climbers are familiar to and appreciated by all. They are of rapid growth, and very attractive when covered with the large handsome flowers.

Pink, 25c each.

Scarlet, 35c and 50c each.

PLUMBAGO CAPENSIS. Flowers light sky-blue, verbena-shaped, produced throughout the entire summer. **4-inch pots, 35c each.**

PLUMBAGO, WHITE. **4-inch pots, 35c each.**

SOLANUM JASMINOIDES GRANDIFLORA. A most beautiful climber. Its flowers are star-shaped, and borne in good-sized panicles or clusters. **3-inch pots, 25c each.**

SMILAX. **4-inch pots, 25c each; $2.00 per 10.**

SILK VINE. Of very rapid growth; produces balls filled with "silky down." **4-inch pots, 35c each; $3.00 per 10.**

VITIS CAPENSIS. Another evergreen grape vine; leaves much larger than preceding; underside brown tinge. **4-inch pots, 35c each.**

THE WISTERIA

Very hardy, growing in cold countries to perfection. We offer the following varieties:

CHINENSIS. Clusters about a foot long; flowers single, pale blue. **Strong plants, 80c and $1.00 each, according to size.**

MULTIJUGA. Racemes long and slender; very dark blue; native of Japan. **Strong plants, 80c and $1.00 each.**

MULTIJUGA ALBA. Bears long racemes of pure white flowers. **80c and $1.00 each.**

HERBACEOUS PERENNIALS

ANEMONE JAPONICA. **White, Rose. 25c each.**

BOUVARDIA JASMINOIDIS. Very sweetly scented blossoms; white or light pink. **35c each.**

CAMPANULA. Very desirable hardy perennials. Should be in every collection. **Single white, single blue and single pink, 10c each; 75c per 12.**

CENTAUREA CANDIDISSIMA. A pretty border plant; silvery white foliage. **3-inch pots, 15c each; $1.25 per dozen.**

CESTRUM AURANTIACUM. This perennial produces orange-yellow blossoms for a long period; very desirable. **4-inch pots, 30c each; $2.50 per 10.**

CALCEOLARIA YELLOW. A splendid bedding or border plant; produces its showy yellow flowers for a very long period. **3-inch pots, 15c each; $1.25 per dozen.**

COREOPSIS LANCEOLATA. The flowers, which are yellow, are of graceful form, are invaluable for cutting for decorative purposes. **10c each; 75c per 12.**

DELPHINIUM (Larkspur). A remarkably showy class of tall growing plants, producing magnificent spikes of blue flowers in summer. We offer two shades, light blue and dark blue. **25c each; $2.00 per 10.**

DIGITALIS (Fox Glove). Tall-growing plants, throwing up very long spikes of lovely bell-shaped flowers in great profusion. **10c each; 75c per 12.**

GAILLARDIA GRANDIFLORA. Flowers bronze scarlet, bordered with golden yellow, three inches in diameter, produced on long stems. **10c each; 75c per 12.**

GAZANIA SPLENDENS. Produces masses of orange-yellow flowers in spring; beautiful for banks and borders. **50c per 12; $3.00 per 100.**

LAVENDER, ENGLISH. **4-inch pots, 15c each; $1.50 per dozen.**

PHLOX. **Perennial Sorts. 20c each; $2.00 per 12.**

POTENTILLA. Single mixed. Very showy perennials, with scarlet blossoms. **15c each; $1.50 per 12.**

PAEONY HERBACEOUS. PINK, WHITE, RED, YELLOW. 30c each; $2.50 per 10.

PRIMULA AURICULA. 15c each; $1.50 per dozen.

PRIMULA OBCONICA. 25c and 35c each.

PENTSTEMON. Very ornamental plants, producing long spikes of showy colors in great abundance. **15c each; $1.50 per 12.**

SHASTA DAISY (Alaska). The flowers are very large, borne on long stems and very free in bloom. Single white, with yellow center. **15c each; $1.00 per 12.**

Digitalis or Fox Glove

FLOWERING AND BEDDING PLANTS

ABUTILON Flowering Maple. 15c each.

ASTER, SEMPLE'S NEW BRANCHING. Crimson, lavender, pink and white. Ready about April 15th. **30c per 12; $2.00 per 100.**

BEGONIA ERFORDII (Beauty of Erford). It is more dwarf and spreading than Luminosa. The color is a lovely soft pink throughout. All ready about April 15th. **10c each; 75c per 12; $6.00 per 100.**

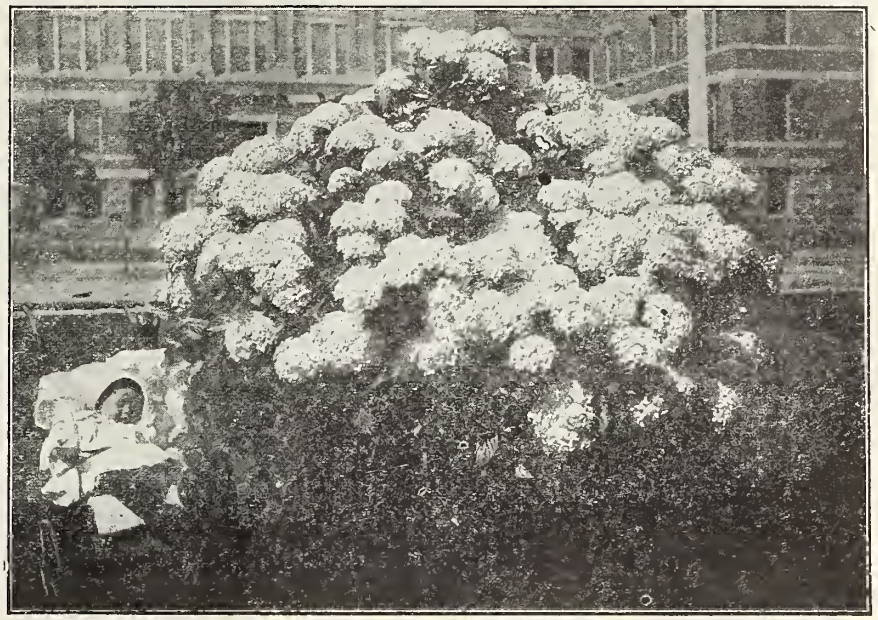
BEGONIA SNOW QUEEN. This bedding sort produces its snow-white flowers in the greatest profusion. **10c each; 75c per 12; $6.00 per 100.**

BEGONIA LUMINOSA. An improved "Vernon." Flowers vivid scarlet; a very showy bedding plant. **10c each; 75c per 12; $6.00 per 100.**

CINERARIA. As a winter blooming plant for house culture, or for use for bedding under the shade of large trees, these are invaluable. We offer a fine strain. **10c each; $1.00 per 12.**

COSMOS. Crimson, pink, white and yellow. Ready about April 15th. **25c per dozen; $1.50 per 100.**

CUPHEA THYMIFOLIA. Flowers lavender; produced continuously; dwarf habit. **25c and 50c each.**



Hydrangea Hortensis

DAISIES. Double, all colors. **35c per 12.**

ECHEVERIA (Hen and Chickens). **50c per 12.**

GOLDEN FEATHER. **25c per 12; $2.00 per 100.**

HYDRANGEA HORTENSIS. This plant is a most satisfactory one, blooming as it does for such a long period; they succeed admirably when planted in a shady place in the garden. **25c, 35c and 50c each, according to size.**

HELIOTROPE QUEEN. Very dark. **15c and 25c each.**

HELIOTROPE SAPPHIRE. Purple, white center. **15c and 25c each.**

HOLLYHOCK. Fine selection. **4-inch pots, 15c each; $1.50 per 12.**

LANTANA. Extremely pretty plants, producing their odd-colored brownish-yellow flowers in great profusion for a long period. **3-inch pots, 20c each; $2.00 per 12.**

LOBELIA. Dwarf blue. Ready April 15th. **30c per 12; $2.50 per 100.**

MESEMBRYANTHEMUM PINK. These are much used for bedding purposes and planting on banks and hillsides where there is a scarcity of water. They make a gorgeous sight when massed. **50c per 12; $3.00 per 100.**

MESEMBRYANTHEMUM. Lavender flowers. Foliage smaller than preceding; this is the variety that the famous "Live Fence" was made from at the Exposition and which was so universally admired. **50c per 12; $3.00 per 100.**

MARGUERITE, WHITE. **15c each; $1.50 per 12.**

MARGUERITE, YELLOW. **15c each; $1.50 per 12.**

NEW MARGUERITE, MRS. SAUNDERS. The flowers are snow-white and double (late in the season, however, there is a percentage that comes single); produced in prodigal luxuriance. **3-inch pots, 15c each.**

PANSIES (Morse's Prize Strain). **50c per 12.**

PETUNIA, SINGLE. Ready March 15th. **15c each; $1.50 per 12.**

ROMNEYA COULTERII. CALIFORNIA TREE POPPY. Produces very large pure white flowers, with yellow centers, deliciously perfumed. **5-inch pots, 75c each.**

SANTOLINA. A beautiful border plant; foliage silvery gray; stands trimming well. **50c per 12; $3.00 per 100.**

SALVIA SPLENDENS. Scarlet flowers; continuous bloomers. Ready March. **10c each; 75c per 12.**

SEA PINK (Armeria). Very dwarf, requiring no trimming. Flowers rose-pink. **40c per 12; $2.50 per 100.**

SPERGULA. Very dwarf, splendid for edging. **Square foot, 50c.** One square foot would make an edging 25 feet long.

SNAPDRAGON. Fine varieties, in separate colors. **25c per 12.**

STOCKS. In fine assortment. **20c per 12.**

STREPTSOLON JAMESONII (The "Yellow Heliotrope"). A very useful garden plant, producing masses of showy yellow flowers. **25c each.**

THYME, VARIEGATED. Good for edging. **50c per 12.**

VERBENA, MAMMOTH. All colors. Ready March. **10c each; 75c per 12.**

WALLFLOWER. **25c per 12.**

TUBEROUS ROOTED BEGONIAS

We have an extra fine strain of these lovely flowers to offer. The colors are simply wonderful and impossible to adequately describe; they come in all shades. The formation of the flowers is also quite distinct, some are large and very double; the singles are beautiful; some have plain edges, some fimbriated, some fluted and others crested.

CULTURE—The bulbs should be started in damp moss in March and April; when they have made a small growth they should be potted into four-inch pots, using open soil, plentifully supplied with leaf-mould, sand and rich manure (the Begonia is a great feeder). When the plants have been growing in these pots for four or five weeks, the roots will begin to fill the pot; they must then be shifted into a six-inch pot, using the same preparation for potting, and then can be allowed to bloom in these pots, or you can move them into a larger pot if you so desire; six-inch pot plants will, however, give very good satisfaction. They require a sunny place in the greenhouse and see that they have good drainage. When they commence to bloom, the two small flowers that appear on each side of the center blossom (which is the male flower and the outside flowers are the female) are nipped out and the strength goes to the male flower. They will bloom for a long time; we have had them bloom for four months at our nurseries. They are a continual source of great pleasure; we know of no flower that will give greater satisfaction than the Tuberous Rooted Begonia. The above instructions apply to pot culture.

The Tuberous Rooted Begonia can also be, and is much used for bedding purposes and gives the very best of satisfaction. A partially shaded place should be selected for this purpose.

Our collection of bulbs includes all shades of WHITE, RED, SCARLET, CANARY-YELLOW, STRAW COLOR, BRONZE, BUFF, APRICOT, TAN, TERRA COTTA, SALMON, PINK, ROSE, every color excepting BLUE. Those ordering please mention what shades they prefer.

PRICE: EXTRA SELECT VARIETIES, FOR POT CULTURE, SINGLE OR DOUBLE BULBS, 35c EACH; $3.50 PER DOZEN BY MAIL, POSTPAID.

FINE STRAIN FOR BEDDING PURPOSES, 20c EACH; $2.00 PER DOZEN, POSTPAID.

POTTED PLANTS AND FERNS

ARALIA SIEBOLDII. A handsome tropical-looking plant, with fig-shaped leaves; succeeds well in the house; or they can be planted outside; they are hardy. **25o, 35o and 50c each.**

ASPARAGUS PLUMOSUS. The leaves are a bright green, are gracefully arched, and are as finely woven as the finest silken mesh, surpassing Maiden-Hair Ferns in grace, fineness of texture and richness of color. **35c, 50c, 75c and $1.00 each.**

ASPARAGUS SPRENGERII. A variety of recent introduction. It is as a basket plant that this will prove most valuable. **25c, 35c and 75c; in hanging baskets, $1.50 each.**

ANTHERICUM VARIEGATUM. Foliage beautifully striped yellowish white; succeeds admirably in the window; also much esteemed as a basket plant. **4-inch pots, 35c.**

ASPIDISTRA LURIDA. This is the plant one sees so many of in windows, halls and stores. The foliage is large, lily-like in appearance, of a dark green color. It is of rugged constitution and will stand in locations that will kill most plants. **$2.50 and $3.50 each.**

ASPIDISTRA LURIDA VARIEGATED. A variegated form of the preceding. **7- and 8-inch pots, $2.50 and $3.50.**

ASPLENIUM FALCATUM (Holly Fern). A favorite variety for house culture and also hardy. Fronds very dark green, glossy and beautiful, **3-in. pots, 20c, $1.50 per 10; 6-in. pots, 60c, $5.00 per 10.**

COLEUS. 15c and 25o each. Larger plants later in the season. **50o each.** Ready April.

CYCLAMEN. Charming plants, with beautiful foliage and richly-colored fragrant flowers. Universal favorites for winter and spring blooming. **Pot-grown plants 50c each.**

NEPHROLEPIS BOSTONIENSES. The well-known Boston Fern so universally admired. A very good house fern, succeeding where other sorts fail. **5-inch pots, 50c each; 8-inch pans, $1.25 each; 9-inch pans, $1.50 each.**

NEPHROLEPIS ROOSEVELTII. Similar to the Bostonienses excepting that the fronds are beautifully crimpled, long and arched. A most desirable sort. **5-inch pots, 50c each; 6-inch pots, 65c each; 8-inch pans, $1.25; 9-inch pans, $1.50 each.**

NEPHROLEPIS SCHOLYELLI. A new sort; habit of growth very erect and strong. **6-inch pans, 50c each; 7-inch pans, 75c each; 8-inch pans, $1.25 each.**

NEPHROLEPIS WHITMANII. Fronds beautifully plumed and crested; of most exquisite beauty; very desirable for house culture and a variety that we can recommend. **8-inch pans, $1.25 each; 9-inch pans, $2.00 each.**

PLATYCERIUM ALICORNE (Stag's Horn Fern). Fronds are shaped like the antlers of a stag; grow on blocks of wood like an orchid; good for hanging on trees or used in greenhouse; are very beautiful on blocks. **$1.00 each.**

HARDY FERNS

Suitable for planting under pergolas, shady side of houses and under trees.

ALSOPHILA AUSTRALIS. Australian Tree Fern. A beautiful species of quick growth. **50c and 75c each.**

ADIANTUM PEDATUM. "Five fingered fern." **4-inch pot, 40c each.**

ASPIDIUM SPINULOSUM. "Evergreen Lady Fern." **4-inch pot, 40c each.**

DOODIA ASPERA. "New Zealand Sword Fern." **4-inch pot, 40c each.**

LOMARIA SPICANT. "Narrow Sword Fern." **4-inch pot, 40o each.**

PLATYLOMA FULCATA. 4-inch pot, 40c each.

POLYSTICHUM SETOSUM. "Lace Fern." **4-inch pot, 40c each.**

SCOLOPENDRON VULGARE. "Harts Tongue Fern." **4-inch pot, 40c each.**

WOODWARDIA. Produces fronds three to four feet. **35c and 50c each.**

PALMS, DRACAENAS

*Marked thus are for indoor, conservatory decoration, or warmer sections only.

AGAVE, AMERICAN. 6-inch pots, 50c each.

AGAVE, AMERICAN VARIEGATED. 5- and 6-inch pots, 75c each.

BAMBOO FALCATA. Of medium sized growth; foliage bright green. **$1.00 per clump.**

BANANA ABYSSINIAN (Musa Ensete). Very fine for lending tropical effect to our landscaping; of very rapid growth. **35c, 50c and 75c each.**

BRAHEA EDULIS. It has very large fan-shaped leaves of bright green color; is never affected by heat or cold. 2 to 2½ feet. **$2.00 each.**

CALIFORNIA FAN PALM. See Washingtonia.

CHAMAEROPS EXCELSA (Japanese Fan Palm). One of the hardiest of the Fan Palms. **Pot grown, 1 to 1½ feet, 50c each; $4.00 per 10. 2 feet, 75c each; $6.00 per 10. Balled, 1½ feet, 75c each; $6.00 per 10. 2 to 2½ feet, $1.50. Boxed, 3 feet, $2.50 each.** Special price on large lots.

CHAMAEROPS HUMILIS. Boxed, 2½ feet, $2.00 each.

COCOS AUSTRALIS. A magnificent, hardy palm, quite different from the preceding, although under the same classification. The growth is more after the style of a Phoenix or Date Palm. The foliage is gray-green in color. **Potted, 1 to 1½ feet, $1.00 each; boxed, 4 to 4½ feet, $4.00 each.**

***CYCAS REVOLUTA.** The well-known Sago Palm, so much in demand for inside decoration. **$1.00, $1.50 and $2.00, according to size.**

DRACAENA INDIVISA. A fine plant for outdoor planting in California, and much in use for lawns, avenues and parks. **Balled, 2½ to 3 feet, $1.00 each; 3 to 4 feet, $1.50 each; 5 to 6 feet, $3.00 each.** Special prices on large lots.

***KENTIA BELMOREANA.** This fine palm is a valuable addition to our collection. Its leaves are pinnate, dark green, and so beautifully crisp as to gain for it the name of "Curly Palm." **6-inch pots, $2.50.**

***KENTIA FOSTERIANA.** One of the finest of the Kentias, with graceful, bright green foliage. **6-inch pots, $2.50 each.**

***LATANIA BORBONICA.** Leaves large, fan-shaped, of a very cheerful green color. **6-inch pots, $2.00 each.**

PHOENIX CANARIENSIS (The Canary Island Date). Balled, 1 foot, 75c each; 1½ to 2 feet, $1.25 each; 2½ feet, $1.50 each; 4 feet, $3.50 each.

***PHOENIX ROEBELINI.** A very graceful house palm; succeeds very well in the home. **$1.50 and $2.50 each.**

WASHINGTONIA ROBUSTA. One of the most beautiful of our native palms; leaves fan-shaped. **Balled, 1½ feet, $1.00 each; 2½ feet, $1.50 each.** Special prices on large lots.

WASHINGTONIA SONOREA. Balled, 1½ feet, $1.00 each.

YUCCA VARIEGATA. 5-inch pots, 50c each.

Phoenix Canariensis. Unequalled for grandeur

Single Tuberous Rooted Begonias—See page 105.

HARDY EVERGREEN TREES

ABIES—Spruce.

CEPHALONICA—Cephalonian Silver Fir. A remarkable and beautiful species; foliage silvery dagger shaped **Balled, 3 to 4 feet, $2.00 each.**

CONCOLOR. Foliage beautiful sea green; habit most symmetrical. **Balled, 2 feet, $1.00 each.**

DOUGLASII—Douglas Spruce. Balled, 3 feet, 75c each.

KOSTERII. A species with beautiful glaucous foliage; greatly prized for lawn adornment. **Balled, 1½ to 2 feet, $1.00 each.**

ENGELMANNI. As a specimen on a lawn it has few equals. **Balled, 2 feet, $1.00; 2½ feet, $1.50 each.**

EXCELSA (Norway Spruce). Perhaps one of the best known spruces. **Pot grown, 1½ to 2 feet, 75c each.**

EXCELSA AUREA. A species of the preceding, with lovely golden foliage. **Boxed, 2½ feet, $1.25 each.**

LASIACARPA. Native of Northern California and Southern Oregon; foliage sea-green; form of tree most graceful; of quite rapid growth. **Balled, 2 feet, $1.00 each; 3 feet, $1.50 each.**

MENZIESII. Balled, 2 to 2½ feet, 75c each.

NORDMANIANA—Nordman's Silver Fir. A superb variety for lawn or parking. **Balled, 2 feet, $1.50 each.**

PINSAPO—Spanish Silver Fir. A beautiful tree; its compact growth and unique appearance render it worthy of a place in the garden. **One of the handsomest in this class. Balled, 2 feet, $1.50 each; 3 feet, $3.00 each.**

PARRYANA GLAUCA. Habit of growth very symmetrical; foliage glaucous. **Balled, 1½ feet, 75c each.**

ACACIA

For quick growth and shade-affording purposes we know of no better tree. We offer the following varieties, all pot grown.

ARMATA, "Prickly Acacia." Flowers in great profusion; deep orange-yellow. **4-inch pots, 25c each.**

BAILEYANA. One of the most ornamental; foliage beautiful sea-green; flowers yellow, ball-shaped; very profuse in bloom. **10 to 12 inches, 25c each; 3 to 3½ feet, 75c each.**

CULTRIFORMIS. Foliage of this variety is triangular in form; color beautiful sea-green; profuse in bloom; of medium sized spreading growth. **2 to 2½ feet, 35c each; 6-inch pots, 4 feet, 60c each.**

CYANOPHYLLA (Blue-Leaved Wattle). Flowers yellow, leaves very large; glaucous green. **4 to 5 feet, 50c each.**

CYCLOPS. 5-inch pots, 25c each; $2.00 per 10.

DEALBATA. One of the finest of the feathery foliaged; yellow flowering sorts. **4-inch pots, 35c each; 5-inch pots, 50c each.**

LATIFOLIA. This variety is much used for windbreaks; it is excellent for sidewalk planting, as it can be trimmed to any desired shape. **2 to 3 feet, 25c each; $2.00 per 10; 5 to 6 feet, 40c each; $3.50 per 10.**

LINIFOLIA. 6-inch pots, 6 to 8 feet, 60c each; $5.00 per 10.

MOLLISSIMA. A fine, quick-growing variety; foliage feathery, sea-green; produces great masses of lovely yellow flowers early in spring. **3 feet, 35c each; $3.00 per 10; 4 feet, 50c each; $4.00 per 10.**

MELANOXYLON (Blackwood Tree). A splendid sort for sidewalk planting; of very quick growth. **3-inch pots, 15c each, $1.00 per 10, $8.00 per 100; 4-inch pots, 3½ to 4 feet, 35c each, $3.00 per 10; 5-inch pots, 4 to 4½ feet, 50c each, $4.00 per 10; 6-inch pots, 5 to 6 feet, 60c each, $5.00 per 10.**

PYCNANTHA (Golden Wattle). Flowers rich yellow, ball-shaped; leaves large, leathery. **5-inch pots, 4 to 5 feet, 40c each.**

PRUNOSA. A most graceful sort; feathery foliage. **5-inch pots, 35c each.**

REASIANA. A variety with heath-like foliage; producing yellow flowers in greatest profusion. **1½ to 2 feet, 35c each; $3.00 per 10.**

RETINOIDES FLORABUNDA. Pendulous habit; sea-green foliage; very floriferous and sweet perfumed. **3 to 3½ feet, 30c each; $2.50 per 10; 6 to 7 feet, 60c each; $5.00 per 10; 8 to 9 feet, 75c each.**

ARAUCARIA EXCELSA (Norfolk Island Pine). One of the handsomest of all trees; pyramidal in form and very symmetrical; hardy in protected locations. Excellent for parlor decorations. **6-inch pots, $1.75 each.**

ARAUCARIA IMBRICATA (Chili Pine, or Monkey Tree). A fine tree, of regular pyramidal form; leaves bright green, broad, thick, pointed, overlapping each other. **6-inch pots, 1½ feet, 75c each; balled, 1½ feet, 75c each; 2 feet, $1.00 each.**

CALIFORNIA BIG TREE (Sequoia Gigantea). 6-inch pots, 1½ feet, 75c eaoh; $6.00 per 10; balled, 2½ to 3 feet, $1.50 each.

CAMPHOR TREE (Laurus Camphora). A fast-growing, very symmetrical, ornamental tree, thriving in the very poorest soil. Well adapted for lawn purposes. **Pot grown, 1½ to 2 feet, 50c each.**

CASUARINA

A very rapid growing tree with "pine-like" foliage; good on the coast or interior valleys; for windbreaks, high hedges or street trees (when pruned properly) has few equals.

STRICTA. 6-inch pots, 3 to 4 feet, 35c each, $3.00 per 10.
STRICTA. Balled, 1½ feet, 25c each, $2.00 per 10.
STRICTA. Balled, 4 to 4½ feet, 75c each, $6.00 per 10.

CEDRUS ATLANTICA. A large growing tree; of quick growth; for parking is much in demand. **Balled, 5 to 6 feet, $3.50 each.**

CEDRUS DEODARA, Indian or Himalayan Cedar. One of the handsomest of coniferous trees. **Balled, 2½ to 3 feet, $1.50 each, $12.50 per 10; 4 feet, $2.00 each; 5 feet, $3.00 each.**

CYPRESS

CALLESTRIS ROBUS, "Cypress Pine." A very handsome species; foliage feathery, graceful and of pendulous habit. **Balled, 3 feet, $1.00; 4 feet, $1.50 each; 4-inch pots, 35c each.**

LAWSON SILVER. It is of rather upright growth; the branches droop gracefully, and the foliage is of a lovely sea-green color. **Balled, 2 to 2½ feet, 50c each; $4.00 per 10.**

MONTEREY. A native of California, and one of the most desirable of evergreens; stands pruning well; very extensively planted for hedges. **Transplanted in boxes, 1 year, $2.25 per 100; pot grown, 12 to 18 inches, 15c each, $1.25 per 10; 20 to 24 inches, 20c each, $1.75 per 10.**

ITALIAN. Of upright, pyramidal growth; very much used in landscaping, being peculiarly adapted for such work. **Balled, 3 feet, 75c each; 4 feet, $1.50 each; 5 feet, $2.00 each; 6 feet, $3.00 each.**

CRYPTOMERIA JAPONICA. A large-growing evergreen; handsome. **Pot grown plants, 1½ feet, 50c each.**

CRYPTOMERIA ELEGANS. Foliage smaller and more graceful than the preceding. **Pot grown, 1 foot, 50c each.**

EUCALYPTUS

AMYGDALINA, Peppermint Gum. Pot grown, 12 to 15 inches, 15c each, $1.00 per 10, $7.00 per 100.

CORYNOCALYX, Sugar Gum. Pot grown, 10 to 12 inches, 15c each, $1.00 per 10.

FICIFOLIA, Scarlet-flowering Gum. A beautiful sort; bearing lovely scarlet flowers, thick leathery leaves; hardy only in warmer sections. **Pot grown, 1 foot, 35c each; 3 to 4 feet, 75c each.**

GLOBULUS, Tasmanian Blue Gum. Transplanted in boxes, $2.25 per 100, $20.00 per 1000; pot grown, 1½ feet, 10c each, $1.00 per 10, $7.00 per 100.

LEUCOXYLON, The Pink Flowering. Pot grown, 3 feet, 35c each.

ROBUSTA, Swamp-Mahogany Gum. Pot grown, 10 to 12 inches, 15c each, $1.00 per 10; 2 to 2½ feet, 20c each.

ROSTRATA, Red Gum. Pot grown, 10 to 12 inches, 15c each, $1.00 per 10, $7.00 per 100; transplanted in boxes, $2.25 per 100, $20.00 per 1000.

RUDIS. Pot grown, 15c each, $1.00 per 10.

TERETECORNIS, Forest Red Gum. Pot grown, 10 to 12 inches, 15c each, $1.00 per 10.

GREVILLEA ROBUSTA, Australian Silk Oak. A most beautiful Australian tree; feathery foliage; orange-yellow blossoms. **4-inch pots, 35c each; 6-inch pots, 50c each.**

JUNIPER, BERMUDA. A distinct and beautiful sort, of spreading growth; bluish green foliage. **Balled, 2½ feet, 75c each; 4 to 5 feet, $1.50 each.**

JUNIPER IRISH. Balled, 3 feet, $1.50 each.

JUNIPER SABINIANA TAMARACIFOLIA. Creeping habit. **12 to 15 inches 75c each.**

HOLLY, ENGLISH. 2½ to 3 feet, $2.50 each.

LAUREL, ENGLISH. A fine evergreen, with broad, shining green leaves; produces large panicles of crcamy white flowers. **1½ to 2 feet, 40c each.**

LIGUSTRUM. See Privet.

LOQUAT. This tree produces a very delicious fruit, which ripens in early summer. It comes in clusters, and is yellow in color. It is also valuable as an ornamental tree, the leaves are large, crumpled and olive-green in color. **5-inch pots, 35c each.**

MELALEUCA DENSEA. 4-inch pots, 35c each; $3.00 per 10.

MAGNOLIA GRANDIFLORA. A well-known handsome tree; leaves large and leathery; flowers very large, pure white; very sweet. **Balled, 3 to 4 feet, $2.00 each.**

PINE, EXCELSA, Bhotan Pine. Balled, 1½ to 2 feet, 40c each.

PINE, MONTEREY. Transplanted in boxes, $4.00 per 100; 4-inch pots, 15c each, $1.00 per 10; balled, 2½ to 3 feet, 50c each.

PINE, PONDEROSA, "Yellow Pine." 3-inch pots, 15c each, $1.00 per 10, $7.00 per 100.

PITTOSPORUM, EUGENOIDES. A large, upright-growing shrub, with glossy, yellowish green leaves; a very effective shrub and **excellent for hedges. 4-inch pots, 20c each, $1.75 per 10; 5-inch pots, 30c each, $2.50 per 10; balled, 1½ feet, 30c each, $2.50 per 10; 2½ to 3 feet, 50c each, $4.00 for 10.**

PITTOSPORUM, NIGRICANS. A very handsome, upright-growing shrub, with silvery light green leaves and black stems. **4-inch pots, 20c each, $1.75 per 10; 5-inch pot, 30c each, $2.50 per 10.**

PRIVET ELEGANTISSIMA AUREA. A variety with beautiful golden foliage. Lovely for hedges. **Balled, 2 to 3 feet, 50c each, $4.00 per 10; 3 to 4 feet, 60c each, $5.00 per 10.**

PRIVET JAPONICUM, Japanese Privet. Leaves glossy, leathery, dark green. A large-growing shrub (or small tree). **Makes an excellent hedge. Balled, 3 to 4 feet, 50c each; $4.00 per 10.**

PRIVET OVALIFOLIUM (California Privet). A valuable hedge plant. **Naked roots, 1½ to 2 feet, 10c each; 75c per 10; $6.00 per 100.**

PEPPER TREE. 1½ to 2 feet, 25c each; $2.00 per 10; $16.00 per 100; 4 to 5 feet, 60c each.

SCIADOPYTIS VERTICILLITA. Fine for vases, **3 to 3½ feet, $3.50 each.**

YEW, IRISH. 3 to 3½ feet, $3.00 each.

YEW, ENGLISH. 2½ to 3 feet, $2.50 each.

HARDY EVERGREEN AND DECIDUOUS SHRUBS

ARBOR VITAE, EVER-GOLDEN. Very handsome, symmetrical, growing shrubs; good for lawn or porch plants. **2 feet, $1.50 each.**

ARBOR VITAE, GOLDEN. Balled, 3 feet, $2.00 each.

AUCUBA JAPONICA. "Gold-dust tree." **8-inch pot, 2½ feet, $1.50 each.**

AZALEA INDICA. Named. 12 to 14 inch head, $1.50 each.

AZALEA LINODIGERI. Flowers scarlet; fine for outside planting. **$1.50 each.**

AZARA MICROPHYLLA. A handsome shrub, having small glossy leaves; orange-yellow flowers. **Pot grown, 35c each.**

BAMBOO PHILIPENSIS. Small foliage; graceful, drooping habit. **6-inch pots, 50c each.**

BOX JAPONICA. 6-inch pots, 1 foot, 50c each; balled, 1½ feet, 50c each, $4.00 per 10.

BOX DWARF, Suffruticosa. A fine small bush, with glossy, roundish leaves. The variety so extensively used for edging. **$5.00 per 100.**

BOX PYRIMADALIS. 3 to 3½ feet, $3.50 each.

BROOM, SCOTCH YELLOW. 3 to 4 feet, 50c each; $4.00 per 10.

BROOM, SPANISH. 1½ feet, 35c each; $3.00 per 10.

BROOM, CANARIENSIS. 4-inch pots, 35c each; $3.00 per 10; 7-inch pots, 75c each.

BROOM, WHITE. 4-inch pots, 2 to 2½ feet, 35c each; $3.00 per 10.

CASSIA TOMENTOSA. 4-inch pots, 25c each.

CALLISTEMON LANCEOLATA. 4-inch pots, 2½ to 3 feet, 40c each, $3.00 per 10.

CALLISTEMON SALIGNA. "Willow Leaved." **4-inch pots, 40c each, $3.00 per 10.**

CALLISTEMON, SCARLET-FLOWERED. 4-inch pots, 40c each, $3.00 per 10.

CAMELLIAS. Double White, $1.00 each; Double Pink, $1.00 each; Double Red, $1.00 each.

CHOISYA TERNATA. "Mexican Orange." A medium-sized growing shrub with glossy foliage; flowers pure white; delightfully fragrant. **5-inch pots, 15 to 18 inches, 60c each.**

COPROSMA BAUERIAUA. Foliage of this lovely shrub as though varnished, succeeds well in windy, exposed situations. **3-inch pots, 25c each.**

COTONEASTER NEPAULENSIS. This shrub is much esteemed; of fairly rapid, upright growth; foliage medium sized; berries bright red; very pleasing. **6-inch pots, 1½ to 2 feet, $1.00 each.**

COTONEASTER MICROPHYLLA. A small-leaved variety of low, spreading habit; much used in making up shrubberies. **5-inch pots, 50c each.**

CRATAEGUS CRENULATA. An evergreen species of the Hawthorn family. Is of dwarfish habit, with glossy foliage, and has berries of a bright scarlet color about the size of a pea. **Balled, 50c and $1.00 each.**

CRATAEGUS LELANDII. Berries orange colored. **1½ to 2 feet, 75c each.**

ERICA MELANTHERA. Splendid winter blooming variety; flowers rose colored. **8 to 12 inches, 60c each.**

ERICA PERSOLUTA ALBA. Flowers white. **8 to 12 inches, 50c each.**

EUGENIA MYRTIFOLIA. Blooms profusely; flowers creamy white; berries purple; foliage ruddy in new growth. **1 to 1½ feet, 50c each.**

HARDY SHRUBS—Continued.

DAPHNES—PINK—WHITE: 1½ feet, 80c each.

DIOSMA, ALBA (Breath of Heaven). This shrub never attains large proportions. It produces small, white star-shaped flowers in great numbers. The foliage, when bruised, emits a sweet fragrance. **3-inch pots, 25c each; 4-inch pots, 50c each.**

DEUTZIA, Pride of Rochester, 3 feet, 35c each.

DEUTZIA GRACILIS. Most charming species of dwarf habit; flowers pure white; produced in great masses in springtime. Excellent for pot culture. **1½ to 2 feet, 35c each; $3.00 per 10.**

ESCALLONIA, RED. Hardy, quick-growing evergreen shrub; blooms continuously. **4-inch pots, 35c each; $3.00 per 10.**

ESCALLONIA, PINK. 4-inch pots, 35c each; $3.00 per 10.

ESCALLONIA, WHITE. 5-inch pots, 40c each.

EUONYMUS, SILVER VARIEGATED. A very pretty ornamental shrub; the foliage is silvery yellow. **Pot grown, 1 foot, 25c; balled, 2 to 2½ feet, 50c each.**

EUONYMUS, DUC D'ANJOU. Golden blotch in center of leaf. **Balled, 1½ to 2 feet, 50c each, $4.00 per 10.**

GREVILLEA THELMANIANA. A charming, continuous-blooming shrub, flowers pink; foliage graceful and attractive. **25c each.**

HABROTHAMNUS ELEGANS. Pot grown, 1½ feet, 25c each.

HEATH, MEDITERRANEAN. This variety is most desirable; it produces its small wax-like flowers in wonderful profusion. **4-inch pots, 35c each; $3.00 per 10. 5-inch pots, 50c each, $4.00 per 10; balled, 1½ feet, bushy, 75c each, $6.00 per 10.**

LAURUSTINUS. A well-known winter flowering shrub, of great beauty, producing an abundance of white flowers; well adapted for hedges. **Balled, 1 foot, 50c each, $4.00 per 10.**

LAURUSTINUS, GOLDEN VARIEGATED. 5-inch pots, 1½ feet, 50c each.

LEMON VERBENA. The fragrance from the foliage of this old favorite is delightfully refreshing. **25c each.**

LEPTOSPERNUM LAEVIGATUM. An evergreen shrub much used in the Golden Gate Park, where it succeeds to perfection. Especially adapted for windy places. **4-inch pots, 30c each, $2.50 per 10; 2 to 2½ feet, 40c each, $3.50 per 10.**

LEPTOSPERNUM NICHOLSI. New and rare variety; flowers scarlet. **8 to 10 inches, 75c each.**

LILAC

CHARLES X. Double reddish purple. **1½ feet, 35c each.**

RUBRA DE MARLY. Reddish purple. **1½ feet, 35c each.**

ROTHMAGENSIS. Double violet purple. **1½ feet, 35c each.**

CHAS. JOBY. Double red. **1½ feet, 35c each.**

LILAC—Continued.

WHITE AND PURPLE. Strong, bushy plants. **3 to 4 feet, 60c each, $5.00 per 10.**

LILAC, WILD CALIFORNIA. (Ceanothus.) **LAVENDER, WHITE. 2½ feet, 50c each.**

MADRONE. 1 to 1½ feet, $1.25 each.

MOCK ORANGE. 2½ feet, 35c each.

MYRTLE. Single white. 5-inch pots, 50c each.

MAGNOLIA SOULANGEA. These deciduous Magnolias produce their handsome, cup-shaped flowers in early spring before the leaves appear; very much admired. The flowers of this variety, white. **2 to 3 feet, 75c each.**

MAGNOLIA PURPUREA. Flowers purple. **2 to 3 feet, 75c each.**

NANDINA DOMESTICA. A charming Japanese shrub, with delicate foliage; graceful flowers, followed by handsome red berries. **4-inch pots, 50c each.**

NEW ZEALAND FLAX (Silver Leaved). Has large sword-like leaves, of a deep rich green color, margined silvery white. Very ornamental. A magnificent plant for lawn decoration. **Clumps, $1.00 each.**

OLEANDER, DOUBLE PINK. Balled, 1½ feet, 50c each.

OLEANDER, DOUBLE WHITE. Balled, 1½ feet, 50c each.

POLYGALA DALMATIANA. A profuse flowering shrub, with purple pea-blossom-shaped flowers, and pretty, light green foliage. **Balled, 1½ feet, 50c each.**

QUINCE (Japanese Scarlet-Flowering). 1½ to 2 feet, 50c each.

RAPHIOLEPIS OVATA. 5-inch pot, 50c each.

RHODODENDRONS. Named sorts. **$2.00 each.**

STERCULIA, Flame Tree. 5-inch pot plants, 35c each.

SNOWBALL. This well-known shrub is known to nearly everyone; white flowers in greatest profusion in May and June. **2 to 3 feet, 50c each.**

SNOWBALL. "High Bush Cranberry." Single white flowers; followed by reddish berries; leaves assume a brown color in fall. **4 feet, 35c each; $3.00 per 10.**

SPIRAEA PRUNIFOLIA. "Bridal Wreath." 18 to 24 inches; 40c each.

SPIRAEA, A. WATERER. Crimson flowers. **1 to 1½ feet, 40c each.**

THUJA AUREA NANA. Compact; golden foliage; elegant. **1½ to 2 feet, $2.50 each.**

THUJA AUREA COMPACTA. 2 to 2½ feet, $2.00 each.

VERONICA COLENSONII. Flowers blue. **Balled, 50c each.**

VERONICA IMPERIALIS. The finest of the species. Flowers amaranth. **4-inch pots, 35c each, $3.00 per 10. Balled, 1½ feet, bushy, 50c each.**

VERONICA VARIEGATED. 5-inch pots, 50c each, $4.00 per 10.

WEIGILEA ROSEA. Much esteemed shrubs; producing lovely trumpet-shaped pink flowers. **2 to 3 feet, 50c each.**

DECIDUOUS ORNAMENTAL AND AVENUE TREES

APPLE, FLOWERING BETCHELLS, double light pink, **3 feet, 50c each.**

ASH, EUROPEAN. A lofty tree of rapid growth, with spreading head and gray bark; pinnate leaves and black buds. **6 to 8 feet, 40c each; $3.50 per 10; $30.00 per 100.**

BIRCH, CUT-LEAVED WEEPING. A charming tree with deeply laciniated foliage. **6 to 8 feet, $1.50 each.**

BIRCH, EUROPEAN WHITE. Remarkable for its elegance; very graceful; with silvery bark and slender branches. **6 to 8 feet, 80c each; $6.00 per 10.**

CERCIS CANADENSIS (Judas Tree, or Red Bud). The tree derives the name of Red Bud from the profusion of delicate reddish purple flowers with which it is covered before the foliage appears. **5 to 6 feet, $1.25 each; $10.00 per 10.**

CHERRY, FLOWERING. Very handsome flowering trees. **4 to 5 feet, 50c each.**

ELM, AMERICAN WHITE. A magnificent large tree, with drooping, spreading branches; one of the grandest of our native forest trees. **6 to 8 feet, 60c each;**

ELM, HUNTINGDON. Of very erect habit; growth vigorous; bark clean and smooth; fine for street planting. **6 to 8 feet, $1.00 each, $8.00 per 10.**

HAWTHORN, DOUBLE PINK. 6 to 8 feet, 75c each, $6.00 per 10.

HAWTHORN, DOUBLE WHITE. 6 to 8 feet, 75c each, $6.00 per 10.

HAWTHORN. Paul's Double Scarlet. 7 to 8 feet, 75c each; $6.00 per 10.

LABURNUM. Golden chain. **6 to 8 feet, 75c each.**

LINDEN, BROAD-LEAVED. The Linden is a magnificent tree; the leaves are beautiful, thus making a very handsome tree. **4 to 6 feet, 50c each; $4.00 per 10.**

LINDEN, AMERICAN, OR BASSWOOD. 4 to 6 feet, 50c each; $4.00 per 10.

LOCUST DECNAISNEANA. Pink Flowering. 7 to 8 feet, $1.25 each.

LOCUST, ROSE ACACIA. Deep pink flowers; very fine. **5 to 6 feet, $1.00 each.**

MAPLE, NORWAY. A large, handsome tree, with broad, deep green foliage, and of very compact growth. **4 to 6 feet, 40c, $3.50 per 10; 6 to 8 feet, 60c each, $5.00 per 10.**

Cedrus deodara (Indian Cedar)

TREES—Continued

MAPLE, SILVER, OR SOFT. A rapid-growing tree of large size; irregularly rounded form; foliage bright green above, silvery beneath; a favorite street and park tree. **6 to 7 feet, 60c each, $5.00 per 10.**

MULBERRY, DOWNING. **6 to 8 feet, 80c each.**

MOUNTAIN ASH, EUROPEAN (Rowan Tree). Flowers creamy white; foliage somewhat like the Pepper Tree; covered from August to November with large clusters of orange-colored berries. **5 to 6 feet, 60c each, $5.00 per 10.**

PEACH, FLOWERING. The double flowering varieties are distinguished for their showy and beautiful bloom. We can supply the **Double White and Double Pink.** **4 to 5 feet, 60c each.**

PLUM, PURPLE-LEAVED. The young branches are very dark purple; the leaves when young are lustrous crimson, changing to a dark purple, and retain this beautiful tint till they drop late in autumn. **4 to 6 feet, 60c each.**

POPLAR, "BALM OF GILEAD." Of remarkably rapid and luxuriant growth, with large glossy foliage. **6 to 8 feet, 60c each, $5.00 per 10.**

POPLAR, LOMBARDY. This is one of the characteristic trees of parts of Italy, and it is from the Italian province, Lombardy, that its common name is derived. Probably a native of Asia. A very rapid, erect growing tree, with a tall, spiry form and particularly striking and picturesque when grouped among other trees. **6 to 8 feet, 60c each, $5.00 per 10.**

SYCAMORE, EUROPEAN. This variety is much in demand for sidewalk planting. **6 to 8 feet, 75c each, $6.00 per 10.**

TEXAS UMBRELLA TREE. This is one of the handsomest of deciduous shade trees, and is adapted particularly to the warm parts of this State. **4 to 6 feet, 60c each; $5.00 per 10.**

WALNUT, CALIFORNIA BLACK. One of the best shade trees for California; of rapid growth. **4 to 5 feet, 50c each, $4.00 per 10.**

WILLOW, BABYLON. **4 to 6 feet, 60c each, $5.00 per 10.**

FRUIT TREES AND SMALL FRUITS

The California Cultivator (a paper devoted to horticulture in this State) submitted to us the following questions and asked us to give them an answer thereto. As they bear very greatly on fruit tree planting in California, and we receive such questions daily from intending planters, we thought we would help planters by giving the questions and our reply. We know it will be of great assistance to the novice in fruit tree planting.

1. How many months are included in the best planting period, i. e., how early may fruit trees be taken from nursery in fall and how late may they be planted?

1. Late December, January, February, and early March.

2. Where is it best to plant them, i. e., can you give a general idea as to planting figs, apples, pears, cherries, walnuts, peaches, and such other fruits? Of course, if you covered all the fruits, this would take too much time, but whatever information you can give is greatly needed by tree planters. Orchard after orchard has been set out, only to prove a failure because owners did not understand this question.

2. Figs should be set out in the warmer sections, principally the San Joaquin and Sacramento Valleys, and the other fruits mentioned can be planted from Mendocino to San Diego. The intending planter, however, must use his own judgment about the best locations for each of these fruits.

3. What age and size of tree is best?

3. The best tree to plant out is what nurserymen call "one-year-old" trees; the root is a year older, so this practically makes the tree two years old, but nurserymen style them "one-year-old"; either three to four feet high or four to six feet high.

4. How large and how deep should holes be?

4. In sedimentary land, the hole does not require to be so very large, 1½ feet square will cover it. In heavier soil two feet will be necessary.

5. Is it best to plant any deeper in well-prepared soil than tree was set in nursery?

5. Plant a little deeper than what they were in the nursery—not more than one inch.

6. Would you recommend close pruning of roots before planting or simply trimming mutilated ends? If you favor close trimming of roots, would you go to the extremes recommended in the Stringfellow method?

6. We recommend medium cutting back of the roots. We would not go to the extreme as Mr. Stringfellow does, although we practice it a great deal in our nurseries when we are lining out young stock, and have good success with it.

7. Would you top trees, i. e., take off greater portion of top grown in nursery, and if so, before or after setting? Would you do it by exact measurement the orchard over, or according to vigor of trees?

7. Trees should be pruned after planting, not before. They should be cut back about to 2½ to 3½ feet; peaches and almonds should have some of the laterals left; prune these to two or three inches from the stem; the main stem has often *blind* eyes; apricots, prunes, pears, apples and plums can be trimmed to single stem.

8. If irrigation water is available, would you settle dirt about the trees with water or by tamping?

8. In the drier sections it is a good idea to use irrigation to settle the soil around the roots after planting, but in the northern parts and in the Santa Clara Valley, where the rainfall is good during the months of January and February, this is not necessary. Work the soil carefully around the roots; in light soil heavier tamping can be done than in heavy, wet land.

9. Would you advise use of fertilizer or manure, either in hole or on surface, at time of planting?

9. In planting large orchards no fertilizing is done.

10. Is any advantage gained by protecting trunks of newly planted trees from rays of sun? If so, what method is best?

10. It is very necessary to protect the trunks of young trees during the first summer months, either by tulle tree protectors, shakes set on the sunny side, or by wrapping newspaper and tying with a cord. This keeps the tree from getting sunburnt and is certainly of great benefit to the young tree.

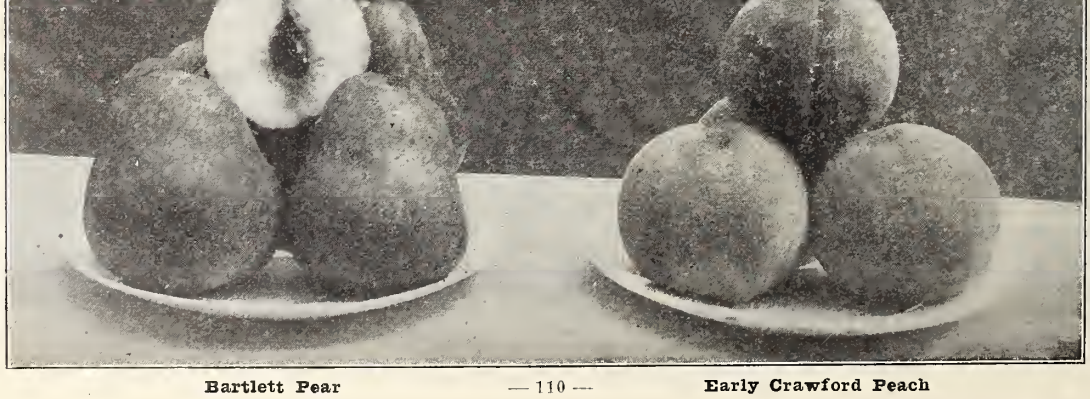
Suitable Soils for Fruit Trees

Trees on the Almond Root require to be in a deep, well-drained and warm soil.

Trees on the Peach Root will succeed in a greater variety of soils; a gravelly soil, a red hill soil, a sandy river bottom, or a moderately heavy land.

The Myrobolan Plum Root is the best for most varieties of prunes and plums, but it requires a rich, moist land to produce the best results, and will do well in quite a heavy wet soil.

The Apple and Pear require a deep, rich land, and will take a good deal of moisture, especially the latter.



Bartlett Pear — **Early Crawford Peach**

The Cherry requires a deep, sandy loam.

The Apricot on Peach Root will thrive in the same soils as the peach on peach root; on its own root it will not do so well in shallow soil.

What applies to the peach applies similarly to the nectarine.

The Quince will grow in very wet land.

The Walnut requires a very deep, rich land.

A FEW DON'TS OF THE NURSERY BUSINESS

Don't plant trees on dry hillsides.
Don't plant where the soil is shallow.
Don't leave the trees the first season without a drop of water or cultivation, and expect anything but poor success.
Don't leave your trees without some kind of tree protector, or they will sunburn.
Don't let your trees go without hoeing and cultivating.
Don't fail to prune your trees after planting.
Don't plant where the hardpan is near the surface unless you first dynamite the holes.
Don't leave your trees exposed to drying winds at time of planting.
Don't let squirrels, rabbits and gophers get fat on your trees.

While we aim to have all our fruit trees true to name, and hold ourselves ready, on proper proof, to replace, free of charge, all stock that may prove untrue to label, or to refund amount originally paid by the customer, it is mutually understood and agreed between the purchaser and ourselves that our guarantee of genuineness shall not make us liable for any sum greater than that originally paid us for such stock as may prove untrue.

APPLES

Price, 4 to 6 feet high, 35c each; $2.50 per 10; $17.50 per 100.

ALEXANDER. Greenish white, streaked red; large. September.

BALDWIN. Large, roundish, deep bright red over a yellow ground; flesh yellowish white, crisp, juicy, sub-acid. Ripe in November and December.

BISMARCK. Very early; large and very agreeable flavor.

DELICIOUS. A very fine eating apple of good size; tender and very sweet flavored. Late.

DUCHESS OF OLDENBURG. Rich sub-acid flavor; does remarkably well in the hot dry sections. July and August.

EARLY HARVEST. Medium size, tender and good. July.

ESOPUS-SPITZENBERG. Large, light red, rich. Sprightly; vinous flavor. November to January.

GRAVENSTEIN. A large striped, beautiful, roundish apple; of excellent quality, juicy, high flavored. A good grower and prolific bearer. Ripe in August.

JONATHAN. Light yellow, with red stripes; tender and juicy, with a sprightly, vinous flavor; excellent for table or market. Ripens October and November.

LADY APPLE. A beautiful little dessert apple; color yellow, red cheek; flavor very pleasant.

MAIDEN'S BLUSH. Medium size; yellow, red cheek on exposed side. August and September.

MAMMOTH BLACK TWIG. Of good size, roundish; dark red, slightly streaked; of excellent quality. November to January.

RED ASTRACHAN. Large, roundish, skin deep red; flesh white, juicy and crisp, though rather acid. The best early apple. Ripe in June and July.

ROME BEAUTY. Large, yellow striped with bright red, very handsome; flesh tender, juicy, sprightly. December to February.

SMITH'S CIDER. Large, handsome, red and yellow; juicy, with very good flavor; tree a vigorous grower and abundant bearer. October.

WHITE ASTRACHAN. Tender, of sprightly flavor; excellent. July.

WINTER BANANA. A very fine late variety of excellent quality. October to December.

WHITE WINTER PEARMAIN. Large, roundish, oblong and pale yellow; dotted with brown; flesh yellowish, delicate, crisp, juicy, sub-acid; extra fine flavor. Ripe December to February.

YELLOW NEWTON PIPPIN. Large; flesh yellow, firm, crisp, juicy, of exceedingly rich flavor. One of the best winter apples. Ripe January to March.

YELLOW BELLFLOWER. Very large, oblong, irregular and tapering toward the eye; skin smooth and of pale lemon color; flesh firm but tender, juicy and sub-acid. A good grower and very productive. Ripens November to February.

CRAB APPLES

Yellow and Red Siberian

CHERRIES

Price, 4 to 6 feet, 35c each; $3.00 per 10; $25.00 per 100.

BING. Fruit large, dark brown or black; very fine; late. A good shipping variety.

BLACK TARTARIAN. Very large, bright black. The favorite.

ENGLISH MORELLO. Large; dark red; of fine quality. A sour sort.

GOV. WOOD. Light yellow, blotched red. The best early.

LAMBERT. Very large; bright rich red; an excellent sort. Ripens two weeks earlier than Royal Ann.

LEWELLING (Black Republican). Large size; a cross between Black Tartarian and Napoleon Bigarreau, having the size and color of the former and the solid flesh of the latter. Late and good.

NAPOLEON BIGARREAU (Royal Ann). Very large; amber in color. The favorite white cherry.

PEARS

Price, 4 to 5 feet, 35c each; $3.00 per 10; $25.00 per 100.

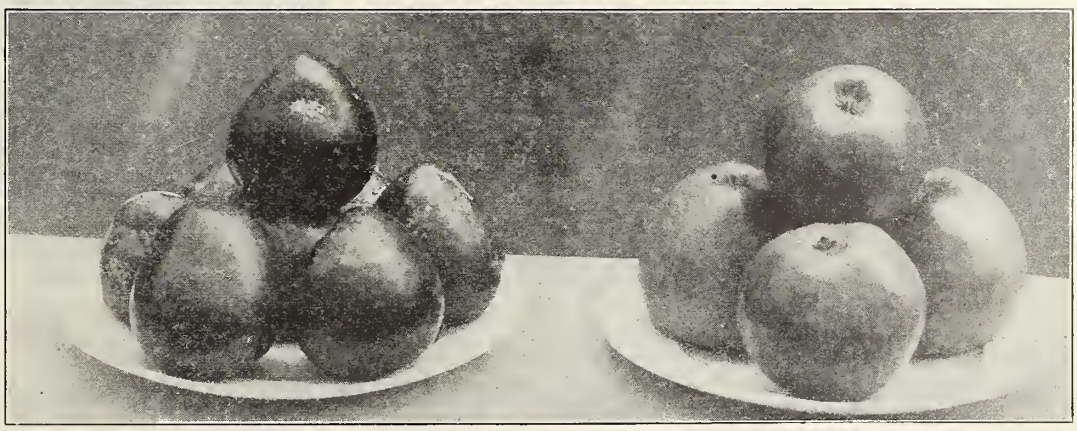
BARTLETT. There is no occasion to describe this variety, so well known is it. A vigorous and strong grower. Bears heavily; good for shipping and canning. Ripe in August.

BEURRE CLAIRGEAU. Very large; red cheek with russet ground. Ripe in September.

SECKEL. Rather small, of good shape; yellow skin, with russety red cheek; flesh creamy white, rich flavor.

WINTER BARTLETT. Fruit large, closely resembling the famous Bartlett, but ripening four months later.

WINTER NELIS. Medium size, roundish, yellowish green, dotted with russet. November to January.



Wickson Plum **Gravenstein Apple**

PEACHES

When pruning newly-planted trees, always leave one or two of the lateral branches, cutting these back to two or three inches. **Price, on Peach root, 1 year, 4 to 6 feet, 35c each; $3.00 per 10; $20.00 per 100. Clingstone varieties $25.00 per 100.**

ALEXANDER. Flesh firm and juicy, sweet; early in June.

BRIGGS RED MAY. Fruit medium to large, skin greenish white, with rich red cheek; flesh greenish white, melting and juicy. Ripens in June.

EARLY CRAWFORD. Very large; color yellow, red cheek; flesh yellow, rich, excellent. Very productive. Ripens about middle of July.

ELBERTA. Very large; bright yellow, with a beautifully mottled red cheek; flesh yellow, juicy, sweet; tree a uniform and regular bearer and strong grower. One of the best varieties for all purposes. Ripens last of July.

FOSTER. Large yellow; resembles Early Crawford, ripening a little earlier; an excellent sort.

HALE'S EARLY. Medium size, nearly round; skin greenish-white, red cheek; very rich and juicy. Ripens early in July.

LATE CRAWFORD. Very large; yellow with dark red cheek; flesh deep yellow, juicy and melting. Ripens middle to end of August.

LOVELL. Flesh yellow to the pit; solid and of excellent quality; a grand canning and drying peach; ripens about end of August.

MUIR. Has a delicious, rich, buttery, sweet flavor. The fruit is large to very large; skin pure yellow; flesh yellow. Ripens end of August.

PHILLIPS CLING. The best late clingstone; in great demand by the canneries.

SALWAY. A large yellow English peach, with deep yellow flesh; very juicy, melting and rich. The most valuable late market variety.

STRAWBERRY. Medium size, oval. Skin marbled with deep red, flesh whitish, juicy, rich and of delicious flavor; ripens about two weeks before the Foster.

TUSCAN CLING. A very fine early clingstone; a good shipping and canning sort.

PLUMS

Price, 4 to 6 feet, 35c each; $3.00 per 10.

BARTLETT. Fruit oval, yellow, turning to deep crimson when fully ripe; flesh light salmon colored, firm and juicy.

BURBANK (Japanese). Large, yellowish ground, with red cheeks; flesh yellow; firm.

CLIMAX. Very large; heart-shaped; flavor rich; extremely early. Ripens in the coast counties early in July before any other good plum.

FORMOSA. Very large, heart-shaped; skin cherry-red; flesh pale yellow, sweet and delicious.

GRAND DUKE. Dark purple; flesh greenish-yellow; rich flavor.

GAVIOTA. Fruit ripens from July 15th to August 5th, and is of a deep rosy purple color; flesh honey yellow, being very fragrant and sweet to the pit, which is so small that the fruit can be called almost stoneless.

GREEN GAGE. Small, but of the highest excellence; round, greenish yellow, with brown dots; very juicy and sweet. August.

JEFFERSON. Large, yellow, red on sunny side; rich and delicious; one of the best. Last of August.

KELSEY JAPAN. Very large, heart-shaped; green, changing to rich yellow, overspread with red; a fine home sort. July to September.

SANTA ROSA. Very large; skin deep purplish crimson with pale blue bloom; flesh purple-shaded rosy scarlet; pit small; a fine eating plum.

WASHINGTON. Deep yellow, with pale crimson blush; flesh yellow, firm, very sweet and luscious, separating from the stone. July and August.

WICKSON. Fruit heart-shaped, skin deep cherry red, flesh amber; very juicy; pit small.

YELLOW EGG. Very large and beautiful; egg-shaped; flesh yellow, rather acid and until fully ripe, when it sweetens.

PRUNES

Prices. On Myrobolan root, 4 to 6 feet, 35c each; $3.00 per 10; $25.00 per 100.

FRENCH (Petite d'Agen). This is the prune now grown so extensively and successfully in California for drying purposes; medium-sized; egg-shaped, violet purple; very rich and sugary. The best prune; prolific bearer. **Can also supply this variety on almond root; same size and price.**

HUNGARIAN. Fruit very large, with tendency to come double; reddish violet, covered with a handsome bloom. Very juicy and sweet. Good shipper.

IMPERIAL EPINEUSE. Large and uniform in size. Very sweet, and of high flavor; the skin is thin and of a reddish purple when green; when dried, coal black.

SUGAR. An extremely early prune; skin very tender; at first of a light purple, tinted with green, changing at maturity to dark purple, covered with a thick, white bloom.

TRAGEDY. This is the earliest of all prunes, and earlier than any plum. Good size, dark purple skin, yellowish green flesh. Sweet and very rich.

Hungarian Prune

NECTARINES

Price, 4 to 5 feet, 35c each; $3.00 per 10.

ADVANCE. Large, round; skin green on shaded parts, blotched with red and brown on sunny side; flesh greenish white, rich and sugary, with a rich flavor. The earliest Nectarine. July.

HUMBOLDT. Largest size; skin bright orange yellow, stained, streaked and mottled with very dark crimson in the sun; flesh orange, very tender, juicy and richly flavored.

APRICOTS

Price, 4 to 6 feet, 35c each; $3.00 per 10; $25.00 per 100.

BLENHEIM. An excellent variety and in great demand. The trees are early and regular bearers and have an abundance of foliage thoroughly protecting the fruit. Fruit above medium, oval; orange color, with deep yellow, juicy and rich flesh. July. **Can supply this variety on Myrobolan, Peach and Apricot root, all at above price.**

HEMSKIRKE. Large, roundish; flesh bright orange; tender and juicy, with a rich plum-like flavor; fruit not quite as large as the Moorpark, but ripening more evenly. August.

ROYAL. A very fine apricot, very extensively planted in this State. Of medium size, yellow with red cheek; immensely productive; an early ripening variety.

ALMONDS

It is necessary (to insure regular crops) to plant about every fifth row, to the Drakes or Texas Prolific variety. These sorts are good "pollenizers."

When pruning newly-planted trees, it is always best to leave two or three of the lateral branches, cutting these back to two or three inches.

Price, 4 to 6 feet, 35c each; $3.00 per 10; $25.00 per 100.

I. X. L. Tree a sturdy, upright grower, with large leaves; nuts large; shells easily, no machine being needed, nor is any bleaching necessary; shell soft but perfect. It bears heavily and regularly.

NE PLUS ULTRA. Introduced by Mr. A. T. Hatch. Tree a rapid grower, of bushy habit; leaves rather large; a heavy and regular bearer; nuts large and very long in shape; soft shell; hulls freely.

ALMONDS, (Continued)

NONPAREIL. Of a weeping style of growth, smaller foliage than the I. X. L. but still forms a beautiful tree; an extraordinarily heavy and regular bearer, with very thin shell, of the Paper Shell type.

PEERLESS. Preferred by some to the I. X. L., which it resembles, but the nut is larger.

TEXAS PROLIFIC. Tree vigorous, with upright, open growth; late bloomer and prolific bearer. Nut medium size. Shell medium soft, smooth, white, easily separating from kernel. Kernel short, broad, plump and very sweet.

QUINCES

Price, 3 to 5 feet, 35c each; $3.00 per 10.

APPLE, or ORANGE. Large, bright yellow. Ripe August and September.

SMYRNA. Extremely large; elongated; lemon-yellow; cooks tender and has a fine flavor; long keeper; tree strong grower with heavy foliage; very prolific.

FIGS

CALIFORNIA BLACK. A well-known local variety. Large, dark purple, almost black when fully ripe. Makes a good dried fig. Tree grows to a very large size, and gives immense yield. (This variety does not require the Wild Fig for pollenization.) **3 to 4 feet, 35c each; $3.00 per 10.**

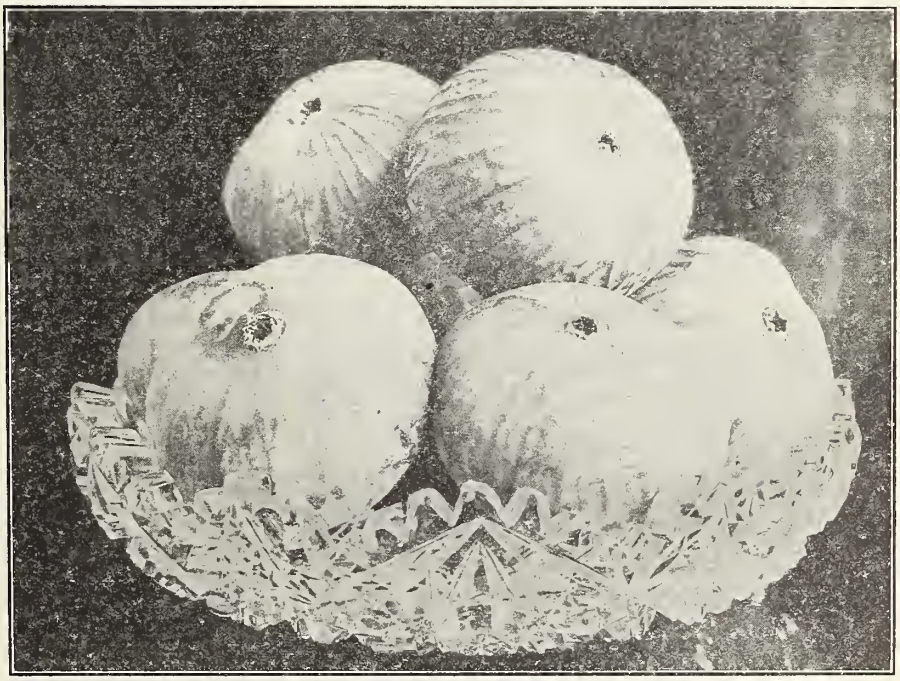
WHITE ADRIATIC. Fruit large; skin greenish, yellow color; pulp carnation red. Ripens from August to October. (This variety does not require the Wild Fig for pollenization.) **3 to 4 feet, 35c each; $3.00 per 10.**

ORANGES

Price, lifted with balls of soil, 4 to 5 feet, ¾ to 1 inch caliper, $1.50 each.

RIVERSIDE WASHINGTON NAVEL. Fruit first-class in every respect; symmetrical, seedless; pulp fine-grained, flavor excellent. A solid, perfect fruit.

VALENCIA LATE, or HART'S TARDIFF. An orange of remarkably strong-growing habit, and claimed by those fruiting it to be a good bearer; a little later than Mediterranean Sweet which it resembles very much.



The Fig is one of our best table fruits

LEMONS

Price, lifted with balls of soil, 4 to 5 feet, ¾ to 1 inch caliper, $1.50 each.

EUREKA. Tree nearly thornless, of rapid growth and prolific bearer; fruit of the best quality. A general favorite.

LISBON. Medium size; sweet rind; very strong in acid; very few seeds; tree a rapid grower and very productive.

VILLA FRANCA. Fruit uniformly medium size, fine grained, sweet rind; very few seeds, good keeper; tree strong grower; prolific bearer.

POMELOS, (Grape Fruit)

Price, lifted with balls of soil, 4 to 5 feet, $1.50 each.

MARSH'S SEEDLESS. Medium, practically seedless; skin thin and smooth; pulp juicy; of superior flavor. Keeps late. A valuable acquisition; its delicious flavor and having no seeds should cause it to take the precedence over many other varieties.

OLIVES

Mission and Manzanillo. ½ to ⅝ inch caliper, 50c each, $4.00 per 10.

STRAWBERRY GUAVA

The Guava is an ornamental evergreen shrub, with pink, shining foliage, and bears when only two feet in height. The fruit is of a fine claret color, and with a flavor resembling that of a strawberry. Makes an excellent jelly. **5-inch pots, 50c each.**

LOQUAT—Large Fruited

The fruit of this Japanese tree is very nice. In this State it ripens in April and May, and is about the size of small plums and comes in clusters; very sweet and refreshing. The plant itself is very ornamental, having large, crimpled foliage of an olive-green color; of spreading, dense growth. **Balled, 2½ to 3 feet, $1.00 each.**

PERSIMMONS

PERSIMMON, JAPANESE. 3 to 4 feet, 35c each; $3.00 per 10.

WALNUTS

CALIFORNIA BLACK. A very rapid growing tree now very extensively used for grafting on. **4 to 5 feet, 40c each; $3.50 per 10; $30.00 per 100.**

FRANQUETTE. Grafted on California Black. 4 to 6 feet, 80c each; $7.00 per 10.

MAYETTE. Grafted on California Black root. 4 to 6 feet, 80c each; $7.00 per 10.

GRAPE VINES

Price, 20c each, $1.50 per 10.

BLACK HAMBURG. Large, round, coal black; sweet and juicy; a fine table variety.

FLAME TOKAY. A magnificent, large red grape.

MUSCAT OF ALEXANDRIA. Bunches and berries large, pale amber.

SWEETWATER. Bunches good size; berries medium size, round fruit.

THOMPSON'S SEEDLESS. Bunches very large; berries greenish yellow, firm, oval, seedless; skin thin, bunches larger than the Sultana.

THE PIERCE GRAPE

This grape originated at New Park, the home of J. P. Pierce in Santa Clara. For a long time it was known in the San Francisco market as Isabella Regina or Queen Isabella, but the name was subsequently changed by the late Mr. John Rock to **"Pierce."** There is no variety of American grapes which can compare with the Pierce in quality, size, luxurious growth of the vine and productiveness. The berries are of immense size, having the delicate flavor of the old Isabella without being too pronounced. **25c each; $2.00 per 10.**

CURRANTS

Currants and Gooseberries should he planted in good soil, which must be kept rich and well worked. Trim out the old wood as soon as it hegins to decline, and shorten all the young shoots, to keep the hushes in good shape.

Two years old, 20c each; $1.50 per 10; $10.00 per 100.

BLACK NAPLES. Berries large and black.

CHERRY CURRANT. Very large, deep red. One of the best.

FAY'S PROLIFIC. Very productive, with long branches covered with large, rich, red-colored fruit.

GOOSEBERRIES

OREGON CHAMPION. 20c each; $1.50 per 10.

RHUBARB

Lorenzo and Australian Crimson. 15c each; $1.50 per dozen.

HORSERADISH ROOTS

10c each; $1.00 per dozen.

RASPBERRIES

Plant in rows five to six feet apart, two to four feet in the row. After the fruit season, cut out all the old wood which bore the last crop of fruit. Pinch the vigorous young shoots several times during the summer. They will then grow stout enough to stand without staking.

CUTHBERT. The largest, handsomest and best red Raspberry cultivated. Bears transportation well. Very productive. **75c per 10; $5.00 per 100.**

SUPERLATIVE. A very fine newer variety; of good quality, very prolific; core is small; deep red color, and of large size. **15c each; $1.25 per 10.**

BLACKBERRIES

Plant in good soil, in rows five to six feet apart, and three to four feet apart in the row. After the fruiting season, or in early spring, cut out all the dead wood. Blackherries should be planted early. A good top dressing of stahle manure, applied annually, will he conducive to large crops.

HIMALAYA BLACKBERRY

The plant is an extremely strong grower and requires to be trained to a trellis. It bears immense crops of fruit, commencing to ripen ahout the middle of July and it will keep bearing until frost. The fruit is very large and the flavor is delicious, having a wonderfully fine aroma which commends itself to everyone. When ripe, it melts in your mouth like sugar.

Tip rooted plants, 15c each; $1.00 per 10; $6.00 per 100. Ready about 15th January.

MAMMOTH BLACKBERRY

Named by some "The Black Loganberry."

The fruit is enormously large, some specimens measuring from 2¼ to 2½ inches long. The glohules are large, seed small, soft and not very ahundant; core quite small and very soft. The flavor is a decided improvement on any known variety of hlackherry; the acid flavor so pronounced in all other kinds is very mild and pleasant, and when fully ripe is quite sweet. Set out nine feet apart, and six feet in the rows.

Tip rooted plants, 15c each; $1.00 per 10; $6.00 per 100. Ready about January 15th.

THE LOGANBERRY

(Raspberry-Blackberry)

The fruit is as large as the largest-sized hlackherry; is of the same shape, with glohules similar to that fruit. Color, when fully ripe, a dark, rich red. It partakes of hoth flavors of the raspberry and the hlackherry, heing a comhination of the two mixed; a very pleasant, mild, vinous flavor, delightful to the taste, not found in any other fruit, hut peculiar to this alone. It is excellent for the tahle, eaten fresh or cooked, and for jellies or jams without an equal. The vines are enormous hearers.

One-year-old plants, 25c each; $2.00 per 10. Tip rooted, 15c each; $1.00 per 10; $6.00 per 100. Ready about January 15th.

STRAWBERRIES

Price, 25c per 12; $1.50 per 100; $9.00 per 1000.

BRANDYWINE. (Per.) Plant a luxuriant grower, healthy and hardy, and very productive; blossoms perfect; fruit very large, of good form, bright red all over, and of good quality. Season, medium to very late. It succeeds on any soil.

MAGOON. Large berry, dark red in eolor, and of very fine aroma.

MARSHALL. (Per.) Of enormous size, blood red color, rich aromatic flavor. One of the good old "standbys"

MOLINDA. (Per.) A fine variety, which originated in Pajaro Valley. Plants are good growers; long lived; make but few runners; staminate, and exceedingly prolific; berries of good size, firm, of a dark-red color.

DISTANCES FOR PLANTING FRUIT TREES

Standard apples	25 to 30 feet apart each way
Standard Pears	20 to 25 feet apart each way
Cherries	20 to 25 feet apart each way
Standard Plums and Prunes	20 to 24 feet apart each way
Apricots, Peaches, Nectarines	20 to 24 feet apart each way
Grapes	7 to 10 feet apart each way
Walnuts	40 to 50 feet apart each way
Currants, Gooseberries and Loganherries	4 hy 6
Raspherries and Blackherries	3 to 4 by 5 to 7
Strawberries for Field Culture	1 to 1½ by 4 to 5
Strawberries for Garden Culture	1 to 2 feet apart

To find out how many trees it takes to plant one acre—Multiply the distance in feet hetween the rows hy the distance the plants are apart in the rows, and the product will he the numher of square feet for each plant or hill, which, divided into the number of feet in an acre (43,560), will give the numher of plants or trees to the acre.

This is a view of the Nursery Sales Yard on Glen Avenue, just off Piedmont Avenue, Oakland. The Vallance Nursery now occupies these premises, and the Messrs. Vallance invite our customers to call and inspect their stock.

TRUE BURBANK SPINELESS CACTUS

Mr. Luther Burbank, who is well known everywhere as a great originator of new plants and fruits, has been most successful in improving the Cactus. The wild Opuntia Cactus is excellent feed for stock, only it is so covered with large spines that it cannot be used unless these have been burned off with a gasoline torch. Mr. Burbank has developed and introduced a strain of these Cactus which is absolutely spineless, and grows more prolificly and with more succulent leaves than any wild strain. With the Spineless Cactus, Mr. Burbank's name is indissolubly linked. It was he who perfected and published to the world the qualities of this plant.

We offer below the true Burbank Cactus from plants which came from Mr. Burbank's grounds.

This Cactus will grow on any soil with a rainfall of from three to five inches where the winters do not freeze. The better the soil the greater the crop, and on the best soils a yield may be had of green forage of fifty tons per acre.

Burbank Cactus is good feed for chickens, hogs, sheep and cattle. Mr. H. R. Timm of Dixon, one of the largest producers of certified milk, raises spineless cactus as one of his crops, which he feeds to his stock in the winter when other green feed is not available. Mr. Timm speaks highly of the Burbank Cactus. The University of California does not recommend extensive planting of it, inasmuch as it has proved to be of exceedingly low food value. We advise planters, if they have good ground, to raise alfalfa instead of cactus, for it is better feed.

However, for those who intend to plant cactus, we have the true Burbank strain. Some varieties have very small spines when they are young, which drop off as the leaf gets older. Others are absolutely spineless, and we have described them as such. There are varieties bred for producing enormous crops of green forage and others for yielding heavy crops of fruit.

We offer all of the following Burbank varieties, and all at the same low price:

ANACANTHA. Long leaves of large size; heavy producer, and a prolific variety; a few small stickers.
FRESNO. Bears fruit and forage; plant quite compact.
HEMET. Round, thick, silvery-green leaves; hardy; entirely spineless.
MELROSE. Same round type as Hemet and Special, with same spineless characteristics.
MARKET. Best heavy yielding fruit sort; fruit crimson.
MODEL. Excellent spineless variety.
NIAGARA. A fruiting variety with large crimson fruit of large size.
ROBUSTA. Very compact cactus, with round leaves; has a few spines.
ROYAL. Thick leaf; does not fruit prolificly; a few spines.
SANTA ROSA. Large leaves.
SPECIAL. Same as the Hemet, but a little more prolific; spineless.

Any of the above varieties, **each, slab or leaf, 25c; per 10 leaves, $2.00; per 100 leaves, $15.00; per 1000 leaves, $100.00.** Above prices are not post paid, and indeed cactus is apt to become bruised in transit and should be sent by express.

Plant the cactus leaves in dry soil, putting the leaf one-third in the ground. They root easily in warm soil which is dry or only slightly moist. Should a leaf become bruised, cut the spot out, sere the edge with a hot iron. Staying out of the ground for a month does not injure the leaves, which indeed should be wilted before planting. Use "Seed" order-sheet for Burbank Cactus.

STANDARD GARDEN TOOLS Write for full descriptive Catalogue

The Standard Garden Tools will save you time, money and lahor. They are made of the best material ohtainable, neatly finished and thoroughly guaranteed to give satisfactory results. They are beyond doubt the simplest and easiest working tools made. No garden, large or small, should he without one.

Nothing will take drudgery away from gardening more than these tools, which will help so very much, and also make greater crops by enahling better cultivation. We only wish that we had more space to devote to describing these Standard tools. They are well finished, strong and well made, and first class. These handles, which are hent over, give a hetter grip, and are much less tiring to work with than the handles which are sawed from a piece of lumher. This is only one of several points of superiority, and one of many points of excellent workmanship. Send for illustrated catalogue and note the very low prices.

STANDARD NO. 9. Combined Single and Double Wheel Hoe, Hill and Drill Seeder. The equal of any seeder with a brush of genuine Russian bristles. 12 attachments. Note the fine handles. **Price, $13.00.**
STANDARD NO. 11. Hill and Drill Seeder. The Planet Jr. Tool for the same purpose is $2.50 more. This has a sure spacer for dropping in hills at different distances. **Price, $10.00.**
STANDARD NO. 4. Single and Double Wheel Hoe with complete equipment. **Price, $7.75.**
STANDARD NO. 22. Single Wheel Cultivator. The cultivator attachment of No. 12. **Price, $6.25.**
STANDARD NO. 14. Hill and Drill Seeder only. Like No. 12 without the cultivating attachments. A fine seeder. **Price, $9.00.**
STANDARD NO. 25. Drill Seeder. The same seeder, but different frame. This will drill seed finely, but will not sow in hills. **Price, $8.00.**
STANDARD NO. 20. Big Wheel Cultivator. Has a 24-inch wheel; three tools—plow, cultivator and rake. The big wheel makes it an easy tool to work. **Price, $4.00.**
STANDARD NO. 12. Hill and Drill Seeder and Single Wheel Hoe combined. The tools comprise three cultivator teeth, two weed cutters and one plow. **Price, $12.25.**

PLANET JUNIOR GARDEN TOOLS

We can supply all numbers of these well known tools. Write for illustrated booklet and prices.

No. 4. Drill Seeder, only $12.00.
No. 6. Hill and Drill Seeder and Single Wheel Hoe, $18.50.
No. 11. Double Wheel Hoe, $12.25.
No. 16. Single Wheel Hoe, Cultivator, Rake and Plow, $8.00.

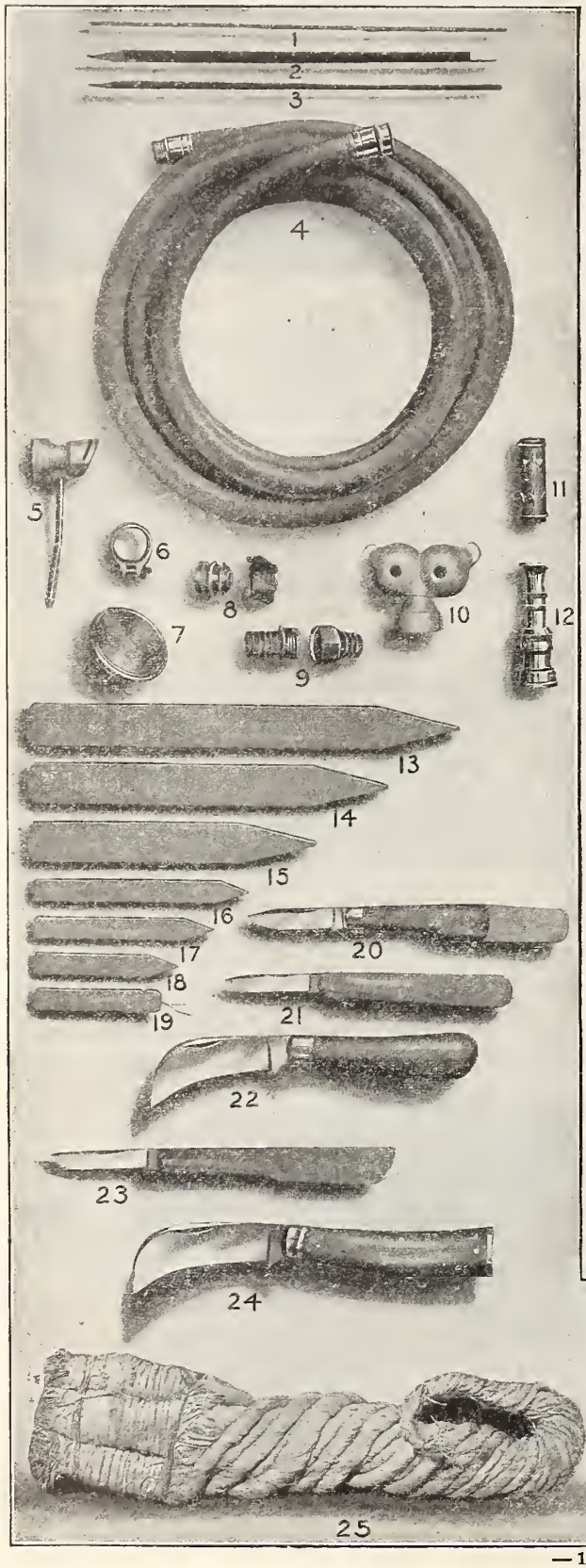
THERMOMETERS

We will mail Thermometers at purchaser's risk only. While the postal charges are less than express charges, yet they get more careful handling by express.

Frost Alarm Outfit (Tycos). Save your crop by knowing when there is a frost in your orchard and at once lighting frost pots to raise the temperature. Write for literature and state at what point you desire notice when ordering. Without batteries, **each, $26.00.**
Mushroom and hot bed, brass point. **$1.50 each.**
Mushroom and hot bed, extra fine, heavy brass. **$2.00 each.**
Mushroom and hot bed, heavy metal point. **$1.50 each.**
Maximum and Minimum Thermometer. Records each day the extreme heat and cold, has a magnet to set the little steel stops which are left at the highest point each afternoon and at the lowest point each night, thus telling the range of temperature for the day. A high grade thermometer in a copper case. **$4.00 each.**
Maximum and Minimum Thermometer. Records each day the extreme heat and cold; wood scale. **$2.00 each.**

Other thermometers and hygrometers can be seen at our store, 125 Market street.

HORTICULTURAL TOOLS AND SUPPLIES



All tools and supplies (except liquids and poisons) may be sent by parcels post at zone rates, but not seed, bulbs and plants, the rate on which is eight cents per lb. Prices do not include postage.

Bamboo Canes.—Fig. 1. **Dozen, 4 feet, 20c; 100, $1.40; 5 feet, 25c; 100, $1.50; 6 feet, 30c; 100, $1.80; 7 feet, 35c; 100, $2.10.**

Garden Stakes.—Fig. 2. Heavy, square, painted green. White tipped, made of redwood and impossible to rot. **Per dozen, 3 feet, $1.10; 4 feet, $1.35; 5 feet, $1.60; 6 feet, $2.00; 7 feet, $2.60; 8 feet, $4.80; 9 feet, 65c each; 12 feet, $1.00 each.**

Garden Stakes.—Fig. 3. Heavy, round, painted green, pointed. **3 feet, $1.00 per dozen; 4 feet, $1.25 per dozen; 5 feet, $1.60 per dozen; 6 feet, $2.00 per dozen.**

HOSE AND HOSE ACCESSORIES

MOULDED HOSE.—Fig. 4. Best grade of pliable pure rubber hose made. Made by the new moulded process which makes a stronger, tougher, more durable hose. This is not the same kind you can buy everywhere. The "Pacific" is the cheapest hose to buy, because it will last. **½ inch, in 25 feet lengths, at 16c** (weight 25 ft., 9 lbs.); **in 50 feet, at 15c. ¾ inch, in 25 feet, at 19c** (weight 25 ft., 12 lbs); **in 50 feet, at 18c.**

Hose Clamps, Sherman.—Fig. 6. Tighten with nut and screw. Use with hose couplings. **½ inch and ¾ inch, 5c each, 55c dozen.** (Weight 10 ozs.) **1 inch, 10c each.**

Hose Couplings.—Fig. 9. Brass (weight 5 ozs.), **15c per pair. Clincher; requires no hose clamp** (weight 4 ozs.), **25c per pair.**

Hose Mender. The "Cooper" Brass.—Fig. 11. Made of thin brass tubing; will not rust or wear out; scarcely decreases the flow of water. For ½-inch or ¾-inch hose. **Price 10c each. For 1-inch hose, 15c each.**

Hose Mender. "Clincher." Either ½-inch or ¾-inch. The best, **10c each, 80c per dozen** (weight 1 doz., 1¼ lbs.).

HOSE NOZZLES

Brass Rose.—Fig. 7. For spraying either greenhouse or garden (weight 5 ozs.). **Each 50c.**

Gibbs Hose Nozzle.—Fig. 12. Adjustable coarse or fine spray (weight 8 ozs.). **40c.**

Oakland Nozzle. Makes a good flat spray (weight 6 ozs.). **40c.**

Ross. Makes a sprinkle stream for hand work. **Each 75c.**

WOODEN LABELS

For trees pots and gardens	Weight lbs.	Unpainted Per 100	Painted Per 1000	Painted Per 1000
3½" iron wire Tree Labels, **Fig. 19**	4¼ per m	$0.20	$1.35	$1.50
3½" copper wire Tree Labels, **Fig. 19**	4¼ per m	.30	1.50	1.75
4" Pot Labels, **Fig. 18**	3¼ per m	.15	1.00	1.15
5" Pot Labels, **Fig. 17**	4 per m	.20	1.15	1.50
6" Pot Labels, **Fig. 16**	4½ per m	.25	1.35	1.75
8" Pot Labels, **Fig. 15**	10-16 per c	.70	5.00	6.00
10" Garden Labels, **Fig. 14**	2¼ per c	.80	6.00	7.00
12" Garden Labels, **Fig. 13**	3¼ per c	1.00	7.50	8.50

KNIVES (Prices are postpaid)

We carry three well-known makes of cutlery, **Jordan's** Sheffield make and **Saynor's Celebrated Knives** (Sheffield), and **Henckel's** from Solingen. These are the best steel there is and are famed the world over. The maker is indicated by J or S or H after the knife.

Budding Knives	Each
Bone Handle, J	$1.25
Ivory Curved Handle, S, Small, Medium	1.75
Ivory Curved Handle, S, Large Spear Blade	1.75
Ivory Straight Handle, Large, **Fig. 23**, S	1.85
Ivory Straight Handle, Medium, S	1.75
Ivory Straight Handle, Small, **Fig. 21**, J	1.50

HORTICULTURAL TOOLS AND SUPPLIES

Prices do not include postage unless so stated.

Pruning Knives (Postpaid) — Each

Small Wood Handle, J. $1.10
Medium Brown Wood Handle Pruner, H. 1.00
Large Pruner, straight handle, S. 1.25
Large Pruner, curved handle, S. 1.75
Wood Handle, unpolished; cannot be closed; small, H. **Doz. $3.25** ..... .35

Various Knives (Postpaid)

Bone Budder, round instead of wedge handle, J. $1.10
Propagating, budding blade opposite ivory wedge, J. 1.25
Grafting Knife, wedge blade, small, J. ..... .65

Raffia.—Fig. 25. Largely used by nurserymen and others and considered the best and cheapest material for tying known. **Lb. 30c; in 10-lb. lots, 25c per lb.** In bale lots (224 lbs.) write for special Eastern prices.

Moss.—Selected Oregon ..... **Lb. 10c; 100 lbs. $5.00**
Selected Sphagnum—**Fig. 26**... **Lb. 15c; 100 lbs. 8.00**

Grafting Wax.—Fig. 27. ¼ lb. 10c; ½ lb. 15c; lb. 25c. Snow's, hard,, per lb. 35c; 10 lbs. $3.00.

Trowels.—Fig. 34. Welded steel shank; weight 10 oz.; **6-inch, 45c each; 7-inch, 55c each.**
Riveted Shank; weight 8 oz. **15c each.**
Hoe; narrow blade like a hoe for transplanting. **50c.**
14-inch handle, 6-inch blade; weight ½ lb., **25c each.**
Long handle, 20-inch; blade 6 inches, **30c each.**
Transplanting, narrow blade (weight 5 oz.) 5 and 6-inch, **15c each**; 7-inch, **20c each.**

Rubber Plant Sprinklers.—Fig. 35. For indoor watering, straight neck, metal top; (weight 9 oz.) **$1.25 each**

Rubber Plant Sprinklers, for indoor watering, angle neck, metal top (weight 9 oz.). **$1.25 each.**

White Rubber Plant Sprinklers. Like above, with hard rubber top (weight 9 oz.) **$1.00 each.**

LAWN SPRINKLERS (See also page 125)

"Twin Sprinkler.—Fig. 10. Made of zinc metal and cannot rust. Will cover the lawn evenly for 16 feet radius. Very popular; weight 10 oz. **Each, 50c.**

Fan Sprinkler.—Fig. 5. Made of zinc metal and shaped so that it will water a bed on one side only. Very convenient to use from a cement walk; weight 9 oz. **Each, 35c.**

GOPHER AND MOLE TRAPS

Gopher Trap, "Ideal." Catches them in a cage. **50c each.**

Gopher Trap "Novelty."—Fig. 33. Without doubt the best gopher trap made; brass jaws; never fails to catch them; weight 3 oz. **25c each. Maccabee, 25c each.**

Mole Trap "Reddick."—Fig. 32. No mole can pass under this trap and live; weight 2¾ lbs. **90c each.**

LAWN MOWERS

Express charges up to 40 cents will be prepaid free.

"THE GRAHAM." The new Philadelphia mower with low knives, high wheels; double gears; all steel; no center bar in front of blades. **15-inch, $18.50; 17-inch, $21.00.**

Philadelphia, Style A.—Fig. 31. Solid steel throughout, ball bearings highly geared; will clip closely and well. Used by the Golden Gate Park extensively for their work. The finest mower made; all parts tested. **15-inch, $16.50; 17-inch, $18.00; 19-inch, $19.50.**

Philadelphia, Style K.—Fig. 30. Has 5 blades, part steel, single pinion; a good high-class mower. **14-inch, $11.50; 16-inch, $12.75; 18-inch, $14.25.**

Old Style Philadelphia.—Fig. 28. Solid blade and wheel. impossible to get out of order; will last a lifetime; does good work. There is no mower just like this and none other so popular. **10-inch, $5.50; 12-inch, $6.00; 14-inch, $7.00; 16-inch, $8.00.**

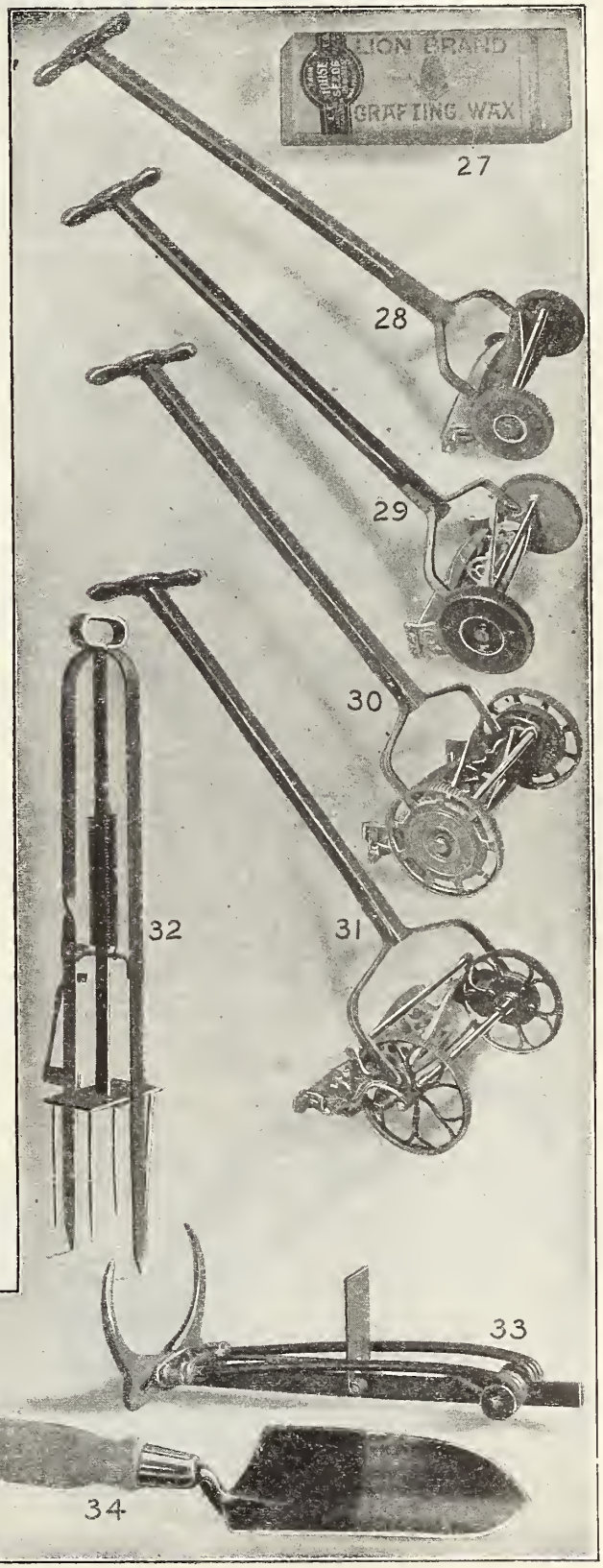
The Colonial.—Fig. 29. An extra good mower at a low price. Is substantially built of best iron and steel, and has ball bearings which make it very easy to run. **12-inch, $5.00; 16-inch, $6.50.**

Overbrook.—14-inch, $6.50.

The Wedgeway.—Fig. 29. Is the same as the **Colonial,** but without the ball bearings. **12-inch, $4.25; 14-inch, $4.50.**

GRASS CATCHERS

Simplex. Galvanized bottom, cloth sides. **75c each.**



Ask for Descriptive Catalogue of **IRON AGE** Farm and Garden Implements. Gives Complete Description

No. 6 COMBINED DOUBLE AND SINGLE WHEEL HOE, HILL AND DRILL SEEDER.

Sows seed in continuous rows or drops in hills at 4, 6, 8, 12 or 24 inches apart. Lever makes quick change. Opens its own furrow, covers it and packs the soil. Has accurate feed, without injury to the seed. Latter is dropped in plain sight—no guess work. The high wheel runs easy. The Wheel Hoe form of this tool is No. 1, shown opposite.

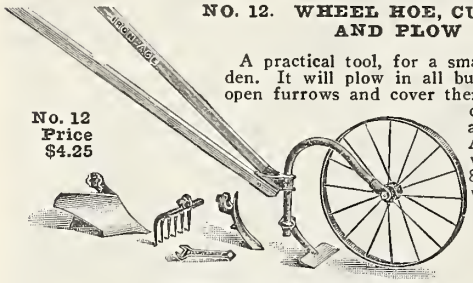
No. 6 Combined Price $14.50. Drill only No. 5, $9.50

Garden Disc Cultivating Attachment (Fig. 369) $2.50

NO. 12. WHEEL HOE, CULTIVATOR AND PLOW

A practical tool, for a small kitchen garden. It will plow in all but hard ground, open furrows and cover them, hill growing crops, hoe, rake and cultivate. Average weight with one tool, 8 pounds. 16-in. wheel.

No. 12 Price $4.25



OTHER IRON AGE TOOLS

No. 9. Single Wheel Hoe, complete, **$6.50.**
No. 13. Double Wheel Hoe (Side Hoes and Teeth only), **$6.75.**
No. 17. Combined Drill Seeder and Single Wheel Hoe, **$12.00.**
No. 19C. Like No. 19, but with a set of cultivator teeth on bracket instead of rake, **$4.25.**
No. 20. Single Wheel Hoe, complete, **$7.25.**

ATTACHMENTS

Fig. 82. Landside Plow. Plows good deep furrow, following in the line of the wheel, **$1.10.**
Fig. 170. Double Moldboard Plow, $1.70.
Fig. 81. Double Weeder Attachment. 5 long prongs to each; breaks up a crust splendidly. **$1.35.**

Catalog gives complete description of these and many others including Horse Hoes and Horse Cultivators. Ask for it.

No. 1. DOUBLE AND SINGLE WHEEL HOE.

Opens and closes furrows, takes care of first working without danger to the young plants, goes astride or between the rows, cultivates, weeds, levels, etc. Does a day's work in 60 minutes. Saves old-fashioned back-breaking work—you walk upright with this tool and weeds never get the best of you.

No. 1 Price $8.50 with Hoes only (called No. 3) $5.25

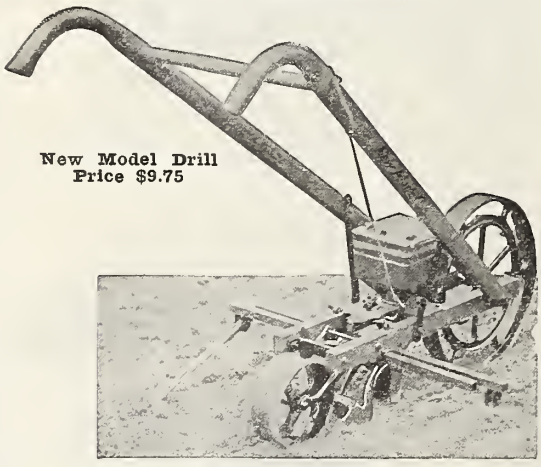
No. 19. WHEEL PLOW AND CULTIVATOR

The main feature of this tool is its extra high wheel—24 inches. Anyone wanting a low-priced tool to begin with, will find that you can do about all of your garden work except sowing the seed. Strong plow.

No. No. 19 Price $4.00

NEW MODEL SEED DRILL.

New Model Drill Price $9.75



On our own extensive seed farms which are illustrated in the first few pages of this catalogue, we use the New Model Seed Drill exclusively. We have found by trying the different makes that this one is the best. The following are reasons which we ask you to consider:

1st. The New Model will sow in rough, lumpy ground without getting clogged. Many of the light Eastern seeders are inefficient on heavy California soils, but not so with the New Model.

2nd. Can be perfectly adjusted to the finest difference in size between the different seeds.

3rd. New Model seeds evenly and cut-off is quickly and easily handled; is economical.

4th. Main wheel is of large size and width, so will not sink in soft earth. Handles are well bolted and adjustable in height; machine is easy to work.

5th. Opening plow is of steel, adjustable in depth; index shows at a glance how to set for the ordinary seeds. A well-made and satisfactory seeder. It will save much labor and give a better stand than other methods of seeding.

HORSE CULTIVATORS

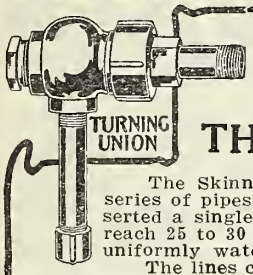
No. 1. Five Tooth Cultivator. A strong framed cultivator adjustable to width of row, 9 to 24 inches. **Price $5.00;** with lever for expanding, **price $6.00.**

No. 1. Seven Tooth Cultivator. Price $6.10; with expanding lever, **price $7.10;** with lever and plain wheel, **price $7.85.**

No. 5. Nine Tooth Cultivator. For orchard work. **Price $9.95.**

No. 37. Five Tooth Dixie Cultivator. Lightly made for work only in light soils. **Price $4.00.**

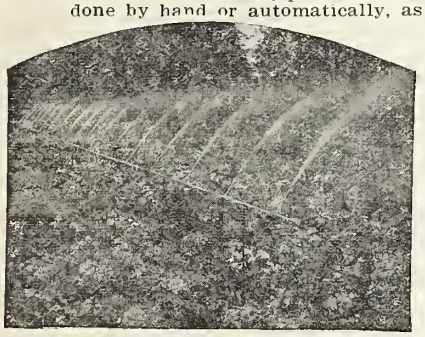
TRADE SKINNER SYSTEM OF IRRIGATION. MARK.



THE SKINNER SYSTEM OF IRRIGATION

The Skinner System of Irrigation is famous the world over. It consists of a single line of pipe or a series of pipes about fifty feet apart, parallel to each other and parallel to the ground. In them is inserted a single row of nozzles about three feet apart. The rows of parallel streams from these nozzles reach 25 to 30 feet from the pipe, and by turning the pipe on its axis a strip 50 to 60 feet wide can be uniformly watered.

The lines can be placed above the ground, on it, or just beneath its surface and the turning can be done by hand or automatically, as is desired.



Garden Sprinkling Line

Garden Sprinkling Lines

Complete, except posts to support them. Easily set up or moved. Equipped with nozzles, turning union, roller supports, valve and quick acting couplings.

Thirty to fifty feet in length at **35c per foot.**

50 ft. line.....**$15.75**
100 ft. line..... **28.25**

For other lengths, add 30c per foot to 50 ft. or 100 ft. price.

In small installations it is economy to purchase the sprinkling lines complete, ready to assemble. In larger installations it is cheaper to buy pipe locally, secure the special Skinner System fittings from us and do your own erection work.

A full line of portable lawn sprinklers, constructed with Skinner System Nozzles is a valuable adjunct to the Skinner System Line.

Portable Lawn Sprinklers, made in three types.

Lawn Mist. Covers 25 ft. strip with fine mist without turning the pipe.

Border. Sprays only in one direction. Position adjustable.

Peacock. Covers a strip 50 to 60 ft. wide.

Each type of sprinkler is made in two styles.

Standard, mounted on wheel trucks. Can be used as a section of long sprinkler.

Junior, mounted on stands. No wheels, not sectional.

Lawn Mist, 15 ft. long.**$9.85**
Lawn Mist Jr., 9 ft. long **4.85**
Border, Std., 15 ft. long **9.85**
Border Jr., 9 ft. long.. **4.85**
Peacock, Std., 12½ ft. long **11.45**
Peacock Jr., 8 ft. long. **5.85**

Peacock Sprinkler

Skinner System Supplies

Silver Stream Nozzles, 6c each, $6.00 per 100.

Greenhouse or Lawn Sprinkler Nozzles, 8½c each, $8.00 per 100.

Turning Unions:

¾-inch.....**$2.10 each**
1 -inch..... **2.10 each**
1¼-inch..... **2.80 each**
1½-inch..... **2.90 each**
2 -inch..... **3.25 each**

Drilling Machine:

Light .....**$9.70 each**
Heavy .....**12.70 each**

Tap Drills, 27c each.

Roller Bearing Hangers, 24c each or $22.00 per 100.

The Skinner System in Some Form is Suited to Every Watering Condition, Large or Small

SEND FOR CATALOG ASK US QUESTIONS

WHY PULL WEEDS?

USE "HERBICIDE"

The everlasting job of pulling weeds is only too well known by every owner of a country home.

Pulling weeds removes the tops only, and these re-appear a few days later.

Destroy the roots and this will be impossible. One application of "Herbicide" does the trick. One gallon makes forty, with water.

Saves many times its cost in saving of time alone, and is being used by the leading cemeteries, parks, cities and estates in the United States and Canada on their walks. Destroys all vegetation.

Quart Can, 75c; Gallon, $2.25; 5 Gallon Can, $7.50; 25 Gallon Barrel, $27.50.

ARE THE ROOTS BEING DESTROYED? IF SO USE "ELECTRIC" WORM ERADICATOR

The finest article to free putting greens from worms or to kill grubs at the roots of your rose bushes and garden plants. Extensive damage may be saved.

"Electric" Worm Eradicator brings all such pests to the surface of the ground when the ground has been drenched with it.

Each gallon makes from 60 to 128 gallons. Comes in glass bottles. Must be shipped by express.

8-oz. Bottle, 50c; Pint Bottle, 75c; Quart Bottle, $1.35; Gallon Bottle, $4.75.

INSECT DESTROYERS

See also pages 125 and 119

Insecticides are best applied as a spray, the more force the greater the effective results. Keep the bugs from once getting a start. Spray early for best results.

The following cannot be sent by mail, except where noted, but must go by express or freight. Poisons are not mailable.

APHINE. A carefully prepared insecticide against all plant lice or aphis, and all sucking insects, white fly, red spider, etc. **¼-pint can, 25c; ½-pint, 40c; 1 pint, 65c; 1 quart, $1.00; 1 gallon, $2.75.**

Arsenate of Lead. Corona dry. A dry, very finely powdered arsenate of lead which may be dusted or sprayed. Only ¼ as much required as of the paste form. Use 2 to 3 lbs. per 100 gallons water. **Does not burn the leaves, ½ lb. 25c; 1 lb. 45c; 5 lbs. $1.85; 10 lbs. $3.25.** Special prices quoted on 50 and 100 lb. lots.

"Black Leaf 40." Tobacco Extract is the strongest extract of tobacco made, being 40% pure nicotine. **"Black Leaf 40"** is non-volatile, so that the full strength is available. Is most valuable as a spray on trees and bushes against aphis and thrip. Dilute 1 to 500, and use with 1 lb. whale oil soap to 50 gal. **10-lb. can, $10.75; 2-lb. can, $3.00; small tin, $1.00.**

Bordeaux Mixture.—Fig. 38. The best and most generally used spray for blight, mildew, curled leaf, pear scab, etc. All prepared and ready for use. Use 4 to 6 lbs. to 50 gallons of water. **1-lb. glass jar, 35c; 10-lb. keg, $1.85.**

Byrne's Ant Destroyer and Slug Exterminator. An effective remedy against slugs, ants, cockroaches and snails. A powder which kills by contact. **4-oz. cartons, each, 25c; postpaid to Pacific Coast, 30c; doz., $2.50.**

Byrne's Plant Tonic and Insecticide. This kills insects and saves your plants. It kills aphis, red spider, mealy bug, plant lice, sow bugs, some scales and other pests. Makes the plants flourish. Exceptionally effective. **Byrne's P. T. & I., 2-oz. bottles, 35c; postpaid to Pacific Coast, 40c; 1-quart cans, $2.25.**

California Wash.—Fig. 40 Lime and sulphur solution. Makes 30 to 40 gallons of spray. The only effective spray for San Jose scale; apply when leaves are off the trees. **1-quart can, 60c; 1-gallon can, $1.50.**

Fish Oil Soap. Much of the whale oil soap so called is really fish oil soap, now properly labeled. Mild scalecide and insecticide may be used on palms and ferns. Postage additional. Cakes of about **1 lb., 20c; about 10 lbs., $1.20.**

Grape Dust. A non-poisonous powder for the remedy and control of mildew and rot on grapes, roses, etc. **1-lb. cartons, 25c; 5-lb. package, 60c.**

Kerosene Emulsion. Ready for use; will kill scale, green lice and other pests that suck; makes 25 gallons of spray. **1-quart cans, 45c; 1-gallon cans, $1.25.**

Nico-Fume Liquid. Contains 40% nicotine. Place a hot iron in 1½ pints of water to which a scant tablespoonful of Nico-Fume has been added. This will kill greenhouse pests over 600 square feet. Useful also to spray against aphis. **¼-lb. can, 75c; 1-lb. can, $2.00; 4-lb. can, $6.50.**

Nico-Fume Tobacco Paper. Strongly saturated with nicotine. Merely suspend from bench and light lower end. One sheet is destructive to 2000 cubic feet. **Air-tight can, 2 dozen sheets, $1.25** (weight 1¼ lbs.); **air-tight can of 144 sheets, $5.00** (weight 4 lbs.).

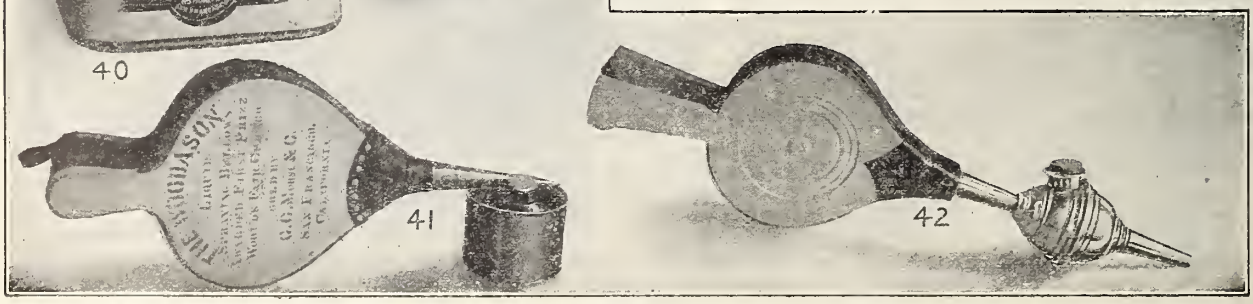
Nikoteen. A tobacco extract of 30% nicotine. Comes in glass bottles. **Per pint bottle, each, $1.50; per case of 10 pints, $13.00.**

Nicoticide. Gallon cans only. **Each, $15.00.**

Paris Green. Pure, poisonous. Kills caterpillars, and all bugs which chew the leaves. **½ lb., 25c; 1 lb., 45c.**

"Rose-Leaf" Extract of Tobacco. Most effectual for the destruction of insects on plants. Dilute with 65 parts of water. Is good for lice, fleas, mange, and scab on animals. **1 pint, 40c; 1 quart, 70c; 1 gallon, $2.25.**

Sulpho Tobacco Soap.—Fig. 46. Mailable. A wonderful insect and bug exterminator. **3-oz. cake** (makes 1½ gallons prepared solution), **10c; 8-oz. cake** (makes 4 gallons prepared solution), **20c.**



INSECT DESTROYERS

Slug-Shot.—Fig. 36. Destroys all insects injurious to house and garden plants, vegetables, and fruits of all kinds—slugs, caterpillars, etc., also poultry lice; as effective as Paris Green without the danger from poison. Mailable. **1-lb. cartons** with perforated top for applying, **20c each; 5-lb. package, 50c; 10-lb. package, 95c. Tin Dusters for applying Slug-Shot, medium sized, 40c each; large size 50c.**

Tobacco Dust. The most economical form to use tobacco as an insecticide; fatal to green and black fly and similar garden pests, by simply dusting over the plants. If dug around the roots will keep away all pests below ground and insure health to the plants. **Coarse, 10c per lb.; 10 lbs., 60c; 100 lbs., $3.25. Powdered, lb, 15c; 10 lbs., 90c; 100 lbs., $6.00.**

Whale Oil Soap.—Fig. 37. Dissolved in water makes an excellent spray for scale on palms, etc. **Cakes of about 1 lb., 20c;** postage additional; about **10 lbs. in bulk, $1.20.**

Tobacco Stems. In bales of about 50 lbs. at 4c per lb.

APPLIANCES FOR INSECTICIDES

WOODASON BELLOWS AND ATOMIZERS

These are the best made bellows; will last a long time and are very strong and durable. These are better sent by express than by mail.

	Each
Bellows, Double Cone, for all fine powders	$3.50
Bellows, Large Single Cone, with spreader—**Fig. 52**, for all fine powders	2.50
Bellows, Small Single Cone, for all fine powders	1.50
Liquid Atomizer, large—**Fig. 41**	2.50
Liquid Atomizer, small	1.75

HEAVY BRASS SYRINGES—Fig. 45. See page 122.

Glass Tank Sprayer (Lowell). Similar to **Fig. 47,** but improved. Has copper tubes and zinc top; nothing to corrode; easy to work on account of air chamber. (Sent by express.) **90c each.**

Morse's Tin Sprayer.—Fig. 39. The new style has can placed across tube. For spraying liquid insecticides of all kinds on plants, kerosene in chicken houses, etc. An all-round useful instrument, and at a low price (weight 2 lbs.). **50c each; $1.25 for three.**

Houchin Powder Bellows.—Fig. 42. In three sizes. Best sent by express. **$1.00, $1.25 and $1.40 each.**

Whitewash Pump.—Fig. 43. Galvanized iron, fine for chicken houses, fences, etc.; light construction (weight 3 lbs.). **$1.95 each.**

Meyers' Bucket Pump.—Fig. 48. A standard force pump of heavy brass. Has brass ball valves and great durability (weight 7 lbs.). **$3.25 each.**

Large Floradora Powder Gun.—Fig. 49. Holds ½ lb. of powder (weight 4 ozs.). **30c each.**

Watering Pot.—Fig. 50. Galvanized iron, with brass fittings and two brass roses, one fine and one coarse, with each pot. These are hard to pack and are better sent by express than by mail. **6-quart, $2.75; 8-quart, $3.15; 10-quart, $3.50; 12-quart, $3.75.**

Watering Pot, Greenhouse Pattern. Built to get close to greenhouse roofs; 4 quarts, **$2.00 each.**

Jumbo Powder Gun.—Fig. 51. (Weight 5½ ozs.). **25c each.**

PARCELS POST

All garden supplies (except liquids and poisons) are mailable at Parcel Post rates. Hundreds of our customers living in the country have availed themselves of the opportunity to buy tools, supplies, pruning shears, etc., which they need, and have them delivered to their houses promptly and without trouble. As the parcel post rates vary to different towns we have only entered the weight of the article in each case. The zone number and rate will be quoted by your postmaster, or we will supply it upon request. See also Page 2.

FERTILIZERS AND SOIL HELPERS

Bone Meal, an excellent fertilizer, moderately strong..... 5 lbs. $0.25
(In sack lots, 125 lbs.).....per 100 lbs. 2.50
Humus. Excellent to lighten soils like peat.....5 lbs. 25c; 50 lbs. $1.00; 100 lbs. $1.75; 500 lbs. $3.00
Manure. Cow or horse manure delivered by the wagonload in San Francisco. Call at our store, 125 Market street, for information.
Nitrate of Soda, dissolve when using, and use very sparingly; is very strong and apt to burn.....3 lbs. .25
" " .....100 lbs. 5.00
Odorless Lawn Dressing.....10 lbs. .60
Best all-around fertilizer; use for lawns at rate of 3 lbs. to 100 sq. ft., 3 applications per year. Good for any plant.....25 lbs. 1.25
Best all-around fertilizer, not only for lawns, but for potted plants and for gardens as well .....50 lbs. 2.00
Best all-around fertilizer.....100 lbs. 3.50

Sheep Manure, very mild, excellent for putting into potting soil, as it helps the texture and increases the fertility. Good for all plants, even the most tender. **7 lbs., 25c; per sack, $1.50.**

Leaf Mould, decayed vegetation of oak and wild lilac. **Per sack** (about 45-50 lbs.), **$1.15.**

Orchid Fibre. Best selected fibre. **Per lb. 30c;** per crate 2x2x2, **$5.00.**

Fertilizer for **alfalfa, clover, peas** and **beans.** See page 53.

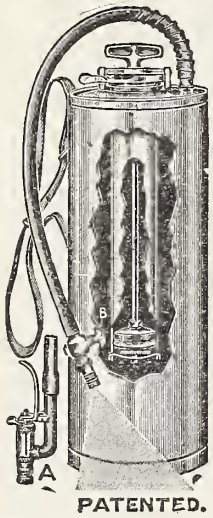
Plant Tablets. Sterlingworth, a 25c package contains 100 tablets, sufficient for 35 plants for 3 months. This certainly makes plants grow splendidly and bloom profusely. In two sizes, **10c and 25c.** (Weight 2 oz. and 4 oz. respectively.)

Soil for Potting. Carefully mixed to make a good soil for house plants. **5 lbs. 15c; per sack $1.00.**

PUMPS, SYRINGES and SPRAYERS of All Kinds

See also those listed on page 121

AUTO-SPRAY No. 1



PATENTED.

Fully guaranteed. The only practical compressed air sprayer, and useful in every variety of spraying. For trees, shrubs, vines, up to five acres of field crops, disinfectants and small whitewashing jobs. The tank is made of either heavy brass or galvanized iron as ordered, and has a capacity around three gallons of solution. The pump is locked to the tank by a cam and can be removed or replaced by a simple twist of the wrist. The joint is made by direct pressure on a rubber gasket. The pump is of heavy brass, two inches in diameter, and two, possibly three, pumpings will discharge the contents under higher constant pressure than any other knapsack sprayer.

We recommend a brass tank—will not corrode, also the Auto-Pop No. 1 automatic shut-off operating a self-cleaning wire through the nozzle. Each machine securely packed in a wooden box, shipping weight, 15 lbs. **Prices:**

Auto-Spray No. 1A—Brass tank with Stop-cock $7.50
Auto-Spray No. 1B—Brass tank with Auto-Pop 8.25
Auto-Spray No. 1C—Galvanized tank with Stop-cock..... 5.50
Auto-Spray No. 1 D—Galvanized tank with Auto-Pop..... 6.00

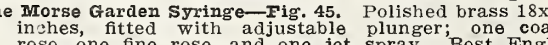
Brass Extension ..... .50
" **Elbow** ..... .45
" **Strainer** ..... .90
Two-row attachment 1.50

HEAVY BRASS GREENHOUSE SYRINGES—Fig. 45

The Morse Garden Syringe—Fig. 45. Polished brass 18x1½ inches, fitted with adjustable plunger; one coarse rose, one fine rose, and one jet spray. Best English heavy brass.
18-inch (wt. 2½ lbs.), **$6.00 each;** with water drip, **$6.25**
20-inch (wt. 2¾ lbs.), **$7.00 each.**
With quick-filling valves, **16-inch, $5.50 each; 18-inch, $6.50; 20-inch, $7.50.**

Ladies' Garden Syringe—Fig. 45. Polished brass, 16x1¼ inches, coarse and fine spray and jet (weight 2¼ lbs.), **$5.00 each.**

Orchid Syringe No. 1. Polished brass, 18x1½ inches; quick-filling valves; drip protector; one rose and five attachments for making mists (weight 2½ lbs.), **$7.00 each.**



IMPROVED BRASS SYRINGE. This is a heavy brass self-filling force pump. It will throw 20 feet, or make a fine spray a few feet distance. This is an excellent pump. Can be used with an extension or attached to a galvanized knapsack tank to be carried on one's back. **Improved Brass Syringe, each $4.75; complete with Knapsack, $8.00; Extension, each 50c.**

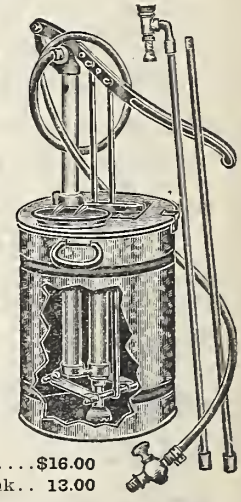
AUTO-SPRAY No. 3-B

The best all-round equipment in high-pressure hand lever pumps.

While primarily built for supplying white-wash and cold water paints, the largest work of this nature being easily undertaken, it is also perfectly adapted to spraying all kinds of trees, plants, shrubs, vines, etc. In fact, it is in every respect a general purpose sprayer. It combines convenience of size with exceptional durability and high pressure, with the price within the reach of all.

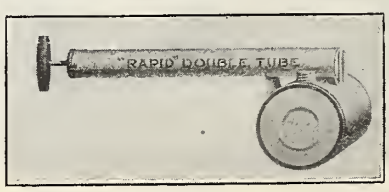
The pump is made of heavy brass with adjustable packing. The tank is of eight gallons capacity, made of heavy galvanized iron and the cover is also heavily reinforced. This cover can be instantly removed, exposing all working parts.

The machine is furnished complete with eight feet of high-grade hose, eight foot extension, stop-cock and latest pattern Vermorel nozzle. Shipping weight, 40 pounds.

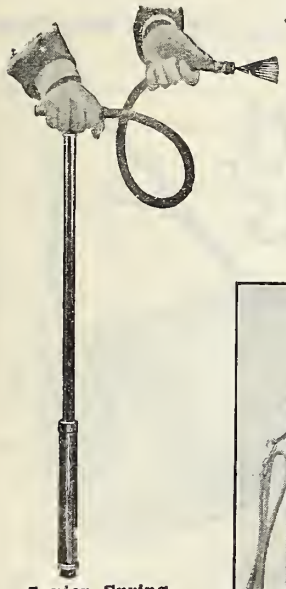


Auto-Spray No. 3-A, brass tank.....$16.00
Auto-Spray No. 3-B, galvanized tank.. 13.00

"EASY" COMPRESSED AIR SPRAYER. Intermediate between the large compressed air sprayers like the "Perfection" and "Auto-Spray" and the tin sprayers. Holds 1 gallon; has automatic shut-off nozzle; well built of galvanized steel. **Each, $2.25.**



DOUBLE ACTION SPRAYER "RAPID"
Made so that the plunger sprays coming back as well as pushing out. Tin.
Each, 60c.



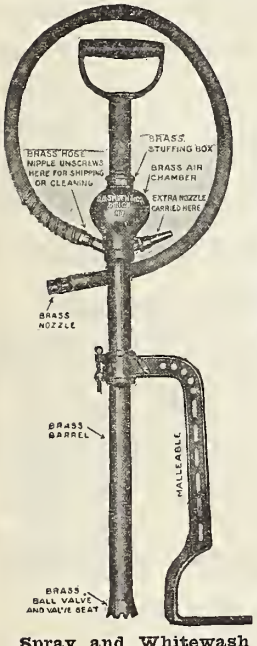
Junior Spring Pump

No foot rest required; continuous spray. It is a wonderful pump!

JUNIOR SPRING PUMP. There is absolutely no leather, rubber, or other packing to rot or get out of order. All valves are brass and packing is brass rings. There is no wear out to this pump. To operate merely press down; no foot rest required, as pump rises of itself. Throws a continuous spray or solid stream in two sizes. (Weight 3 lbs.) **Each, $3.50.**

DOUBLE ACTION SPRAYER "DAISY." Like Rapid above, but made of galvanized iron. Very quick to work with. **Each, 80c.**

MORSE COMPRESSED AIR SPRAYER. Thoroughly made of the very best materials. Nozzle is solid brass, with self-cleaning point and absolutely tight shut-off. Special patented nozzle gives a fine, mist-like, whirling spray, which covers evenly all over, leaving no blank space in center. Holds 4 gallons. Made of heavy galvanized steel or brass, tested to 60 lbs. pressure. To work with this machine is a pleasure, it is so accurate and well made. **Morse Galvanized Sprayer, each $6.00; Morse Brass Sprayer, each $8.50.** (See cut above.)



Spray and Whitewash Pump

MODOC BUCKET PUMP

Makes a compression on the plunger handle, so throws a continuous stream. All brass, except handle and foot rest; bronze ball valve; one cylinder only. **Each, $3.50.**

SPRAY AND WHITEWASH BUCKET PUMP

Made entirely of heavy brass; has brass ball valves which cannot corrode or get out of order; also air chamber valves to throw even, continuous spray. Furnished with Bordeaux nozzle, which can be adjusted to any spray solution. The best whitewash pump there is. (Weight 8 lbs.) **Each, $4.50.**

MORSE CONTINUOUS BRASS SPRAYER. We heartily recommend this sprayer; made of brass all through, has two caps so will spray either up or down. Never fill tank quite full of liquid. Will not corrode. (Weight 1¾ lbs.) **Each, $1.25.**

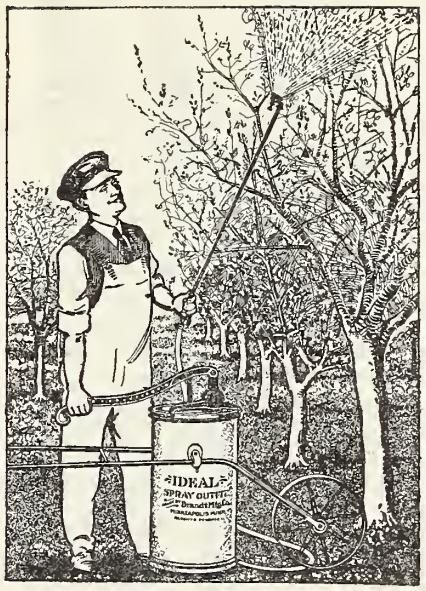
MORSE TIN SPRAYER

Heavy tin, single action; for spraying all liquids. (Weight 2 lbs.) **50c each; $1.25 for three.**

U. T. K. CONTINUOUS SPRAYER. Made of galvanized iron; throws spray uninterruptedly by few strokes. (Weight 2 lbs.) **Each, $1.00.**

MORSE GALVANIZED SPRAYER. We recommend this Sprayer. Made of heavy galvanized iron; has copper tubes and long barrel; is painted aluminum. Good for all small work. (Weight 1¾ lbs.) **Each 75c.**

IDEAL SPRAY OUTFIT. Weight 65 lbs. **Price $21.00.**



This outfit is exceptionally well adapted to use around country homes and small orchards. The tank holds 15 gallons and will not slop or spill; is made of galvanized iron extra heavy. This outfit is always ready; is easy to operate. A pressure of 150 lbs. can be maintained by its special air chamber; has agitator. Get your neighbors together and save your oak trees by spraying with Paris green. Outfit consists of 10 ft. ⅜-in. hose; 10 feet Pipe Extension in three pieces; 1 Brass Shut-off Cock; one Ideal Nozzle; all ready for use and easily carried from tree to tree.

KING BARREL PUMP. Price, $9.25. A fine heavy pump for going inside of a barrel. Valves are of bronze balls. Without attachments.

Bamboo 8-ft. Extentions. Iron Pipe. **$1.75 each.**

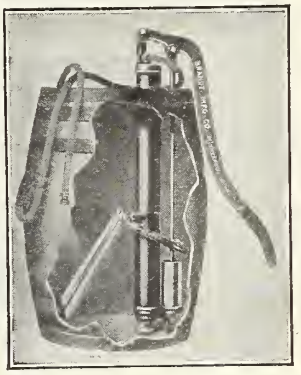
Bamboo 8-ft. Extensions. Brass Pipe. **$2.75 each.**

Spray Controller for use with extensions. The handiest shut-off there is. **$1.60 each.**

Ideal Upshoot Nozzle. Single. Set just right. **Each, 75c.**

Ideal Upshoot Nozzle. Double. **Each, $1.50.**

Cant Clog. Spray nozzle; adjustable. **Each, 90c.**



GARDEN SUPPLIES of all kinds

Asparagus Knife. Extra fine steel and handle riveted through (weight ½ lb.) **Each, 35c; doz. $3.50.**

DIBBLES. Iron Handle (weight 1 lb.) **Each, 35c.**
" **Wood Handle** (weight 1 lb.). **Each, 40c.**

Flower Gatherers' Chubbuck. Black enamel finish on steel. Made like a light pruning shear, with attachment for holding the flower. (Weight 6 oz.) **Per pair, 75c.**

FLOWER POTS

EARTH FLOWER POTS, FERN DISHES, and SEED PANS

The prices on these are all the same. Fern pans are about two-thirds as deep as flower pots, and come in all sizes except 3-inch up to 16-inch. Seed pans are shallow, about one-third of the depth of flower pots, and come in sizes from 5-inch to 10-inch. Flower pots can be shipped by freight or express, but not by mail.

	Each	Per 10	Per 100
3-inch	2 for 5c	$0.20	$1.60
4-inch	$0.05	.30	2.40
5-inch	.05	.40	3.75
6-inch	.10	.75	3.75
7-inch	.15	1.20	9.00
8-inch	.20	1.60	12.00
9-inch	.30	2.50	18.00
10-inch	.40	3.50	23.00
12-inch	.50	4.50	40.00
14-inch Fluted	1.50	13.50	....
16-inch Fluted	2.00	18.00	....
18-inch Fluted	4.00	36.00	....

EARTH SAUCERS for Flower Pots

	Each	Per 10	Per 100
4-inch	2 for 5c	$0.20	$1.80
5-inch	3 for 10c	.30	2.75
6-inch	.05	.40	3.50
7-inch	2 for 15c	.50	4.50
8-inch	.10	.80	7.30
9-inch	.15	1.20	10.00
10-inch	.20	1.60	15.00
12-inch	.30	2.40	22.00
14-inch	.45	4.00	33.00

For packing and shipping charges, add extra 5 per cent to above prices on flower pots and saucers.

PAPER FLOWER POTS

Neponset. Just the thing to start your plants in. Will not break in sending. Shipped nested together.

	Per 10	Weight Per 100	Per 100	Per 1000
2½-inch	$0.10	1½ lbs.	$0.60	$4.50
3 -inch	.15	2½ lbs.	.75	6.00
4 -inch	.20	4 lbs.	1.00	9.00
5 -inch	.25	6½ lbs.	1.50	13.50
6 -inch	.35	8½ lbs.	2.25	20.00

GRANT PLANTING POTS

These are square-folded enclosures or pots made of heavy waterproof paper without bottom. You open them up, stand in a tray, and fill with earth. Reduces the labor cost on seedlings and insures their safe arrival. Used by the U. S. Forest Service extensively. We will gladly mail a sample.

Size in Inches	Shipping Weight	Price Per 10	Price Per 100	Price Per 1000
1½ x 1½ x 4	20 lbs.	$0.10	$0.50	$3.75
2 x 2 x 4	25 lbs.	.10	.50	4.40
2 x 2 x 6	40 lbs.	.10	.75	5.00
3 x 3 x 6	75 lbs.	.10	.75	6.00
3 x 3 x 8	85 lbs.	.10	.75	7.00

GOPHERGO

(Machine Poisoned Raisins and Grain)

GOPHERGO is the best exterminator of gophers, squirrels, prairie dogs, rats and mice and all rodents, ever put on the market. It is the only thing that will get a pocket gopher and will kill ten where a trap will get one. A wonder for cleaning gophers out of alfalfa, beet, truck and orchard land. Squirrels will take both the grain and raisins. It is cheap, ready and easy to use, never loses strength and guaranteed to do the work or your money back. Not allowed in the mails.

25c, Half can (10 ozs.); **50c can** (1½ lbs.); **$1.00 large can** (3¼ lbs.); **$3.00 bucket** (10 lbs.).

Gopher and Squirrel Balls. Same in use as Gopher Cartridges below. **Doz.** (weight 1 lb.), **35c; Gross, $4.00.**

Gopher Cartridges. These emit suffocating fumes when lighted in an enclosed room. Sometimes the only way to get Mr. Gopher. **Each, 10c** (weight 2 oz.); **per 10, 75c** (weight 1 lb.).

Gopher Gun Surepop. Explodes a blank cartridge which tears the gopher to pieces. (Weight 10 oz.) **Each, 75c.** Cartridges, per box of 50, **50c.**

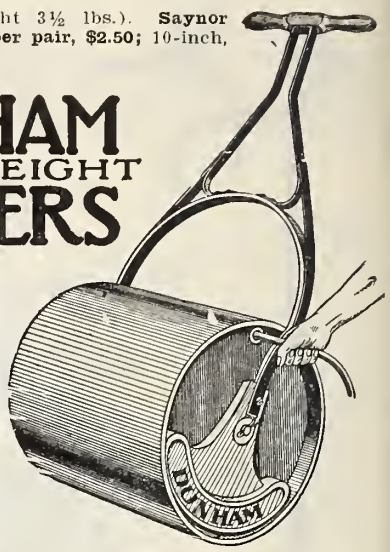
Grass Hooks or Sickles. English make, rough finished. **Each, 40c.**

Grass Shears or Sheep Shears, according to grade (weight 10 and 12 ozs.). **Per pair, 30c, 50c, 85c.**

Glazing Points. Sieberts never rust zinc glazing points for greenhouse use; in ⅝ and ⅞-inch size. **Per lb., 75c.**
Peerless. Two-point tacks to go over and hold the glass. Properly beveled and non-rusting. **Per 1000, 85c.**

Hedge Shears (weight 3½ lbs.). **Saynor** Nothed; 9-inch, **per pair, $2.50;** 10-inch, **per pair, $2.75.**

DUNHAM WATER-WEIGHT ROLLERS



LAWN ROLLERS. Dunham's Water Weight. Made with roller bearings so that they run 44 per cent easier than any other sort. Why waste energy trying to overcome friction? The water rollers can be adjusted to suit the condition of your lawn. **Dunham's are the only rollers for you.**

	Length	Diameter	Section	Wt. Empty	Wt. Filled with Water	Wt. Filled with Sand	Price each	With Bal. handle
W. B. 3	20-in.	14-in.	1	60	200	300	$11.00	$12.50
W. B. 5	24-in.	18-in.	1	75	300	500	13.00	14.50
W. B. 7	24-in.	24-in.	1	125	500	800	17.00	18.50

Dunham's Gold Metal Heavy Iron Rollers with balanced handle

402	24-in.	15-in.	3	200	...	...	15.00	....
404	20-in.	20-in.	2	250	...	...	17.50	....
407	24-in.	20-in.	2	300	...	...	21.00	....
410	24-in.	24-in.	2	450	...	...	32.00	....

Other sizes and weights can be procured to order.

HAND PRUNING SHEARS

Extra Heavy Henckles Professional. The very best pruning shear with leaf springs (weight 1½ lbs.). **8-inch, per pair, $3.00; 9-inch, per pair, $3.50.**

Heavy Henckles Special. A little lighter in weight than "Professional" and preferred by many (weight 1¼ lbs.). **8-inch, per pair, $2.50; 8½-inch, per pair, $2.75.**

Extra Large 10-inch. Coil spring. **Henckles** make (weight 11 oz.). **Per pair, $2.00.**

9-inch Heavy Shear, rough finished, nut bearing. **Per pair, 50c.**

8½-inch Bonita nut with ratchet (weight 20 oz.). **Per pair, $1.75.**

9-inch Rogers, nut with ratchet; a good grade shear (weight 1 lb.). **Per pair, 80c.**

8½-inch Rieser Pattern (weight 1 lb.), an extra fine shear of the best steel. **Per pair, $2.00.**

Ladies' Small Nickel (weight 5 oz.), 6-inch. **Per pair, $1.25.**

Scissor Shears or Rose Shears. Like powerful scissors, with curve to hold the plant while cutting. Black enamel finish on steel (weight 4 oz.). **Per pair, 75c.**

Weiss Orange Shear, curved so as not to injure the fruit in any way; convenient (weight 5 oz.). **Per pair, 75c.**

ORCHARD PRUNING SHEARS

Cronk's Extra Heavy Pruning Shears, made in the Cartright pattern, forged from high-grade tool steel and finely tempered. This is a much better shear than can be purchased at most stores. **Per pair,** 26-inch handles or 30-in handles (weight 3¼ lbs.), **$2.00.**

San Jose Pattern; a cheap long handled shear. **Pair, $1.00.**

Orchard King. With compound leverage. This shear will easily cut the largest limbs that can get in it. **Price, $3.00.**

Detroit. This pruner hooks over the limb. 10 feet. **Price, $2.00.**

Happy Thought. With upright notch. Both have a pump-gun action with powerful leverage, and work easily. Price for both Detroit and Happy Thought, 8-foot, **$1.75;** 10-foot, **$2.00.**

Kansas. Strong 7-0 tree pruner. **Each, $3.00.**

Putty Bulbs. Scollay's. For applying liquid putty to greenhouses with great speed. **Each, $1.00.**

LAWN SPRINKLERS

Beside those listed on page 117 we also carry the following:

Aetna, revolving arms, 20-inch. tall (weight 6 lbs.). **Each, $2.25.**

California, revolving arms, (weight 3 lbs.), 18 in tall. **Each $2.00.**

Champion, adjustable to varying water pressures, made from solid brass (weight 10 oz.). **Each 75c.**

Faultless, to spray on one side of walk (weight 1½ lbs.). **Each, $1.00.**

Fountain, Brass. Perforated brass reservoir (weight 10 oz.). **Each 50c.**

Fountain, Iron. Perforated brass-plated reservoir (weight 10 oz.). **Each, 25c.**

Half Circle, brass case to spray on one side (weight 4 oz.). **Each, 50c.**

Pacific Adjustable. Revolving arms, 18-inch arms, 5-in. high, (weight 2 lbs.). **Each, $2.25.**

Pacific. As above, with pipe sled, 30-in. high (weight 7 lbs.) **Each, $3.50.**

Pluvius. Revolving arms, 12-in. tall (weight 2½lbs.). **Each, $1.75.**

Sunshine. Mounted on a pipe sled. Extra large size, 4-ft. 6-in. arms, 3-ft. 3-in. high. **Each, $5.00.**

Sunshine Tripod. The same as above mounted on a large tripod. An extra fine sprinkler and used at the Panama-Pacific International Exposition. **Each, $6.00.**

Wilgus No. 1. (Weight 12 oz.). **Each, 55c.**

Wilgus No. 2. (Weight 10 oz.). **Each, 75c.**

SEED SOWER

International. For broad-casting all kinds of seeds. Can be set for any amount of seed per acre and for any variety; for barley, alfalfa, wheat, etc. Covers 25 to 50 feet to the round. International has steel frame and pressed tin distributing wheel. Bag holds three-quarters of a bushel. **Each, $1.50.**

Cahoon Style. Blocki broad-cast seeder. **Each, $3.00.**

TREE PROTECTORS
Morse Plain Wood

These are strips of thin wood, 7 inches wide, affording a perfect and necessary protection against sunburn and pests. Wet these before using to prevent cracking.

	Weight	Per 100	Per 1000
12-inch	About 8 lbs.	**$0.60**	**$3.75**

Yucca Fibre. A perfect protection for young trees against rabbits, grasshoppers, sunburn, frost, etc. The usual size is 7 inches wide and of various lengths. Will not crack or break.

12-inch (weight 8½ lbs.); **$1.30 per 100; $11.50 per 1000**
14-inch (weight 10 lbs.); **1.35 per 100; 12.50 per 1000**
16-inch (weight 11 lbs.); **1.50 per 100; 14.00 per 1000**
18-inch (weight 12 lbs.); **1.70 per 100; 15.50 per 1000**
24-inch (weight 19 lbs.); **2.00 per 100; 18.50 per 1000**

Squirrel Gun, Sure Shot. Each squirrel eats 50c or more worth of produce each year. This gun explodes Carbon Bisulphide in the hole and gets them every time at a cost of less than one cent each. Effective against Squirrels, Gophers, Skunks, Badgers, and all burrowing animals. (Weight 1½ lbs.). **Each, $1.00.**

Garden Tool—Alca. Three tools in one, trowel, dibble, hand hoe (weight 20 oz.). **Each, 50c.**

Tubs, Wooden; New York Style. Heavy tubs made of white cedar and painted dark green. Have heavy iron legs and band hoops. Very handsome and durable tubs.

No. 2, 13 -inch diameter x 12¾-inch depth.... **$1.75**
No. 3, 14½-inch diameter x 14¾-inch depth.... **2.10**
No. 3½, 16½-inch diameter x 15¾-inch depth.... **2.80**
No. 4, 19½-inch diameter x 16½-inch depth.... **3.10**
No. 5, 22½-inch diameter x 18½-inch depth.... **3.90**

Philadelphia Style. Heavy tubs of cedar with welded iron wire hoops, and made to set direct upon the ground.

	Diam.	Depth	Each		Diam.	Depth	Each
A	14½-inch	x 13-inch..	**$2.00**	D	11¾-inch	x 11½-inch.	**$1.10**
B	14 -inch	x 12-inch..	**1.70**	E	10¾-inch	x 10½-inch.	**1.05**
C	12¾-inch	x 12-inch..	**1.35**	F	9¾-inch	x 10½-inch.	**.90**

WEEDERS. 3-prong, iron fork (weight 5 oz.).....**10c**
4-prong, retinned spading fork (wt. 8 oz.) **15c**
4-prong, 12-in. handles (weight 12 oz.).. **25c**
5-prong, cast iron (weight 5 oz.).....**10c**
3-prong, straight steel (weight 10 oz.)...**35c**
3-prong, curved steel (weight 10 oz.).....**35c**
Cleveland long handled (too long to mail); no bending **75c**

Dandelion and Thistle Destroyer. A handsome nickeled tube with an edge which is used to cut into the dandelion head, a spring releases a teaspoonful of distillate or gasoline, which **kills the root.** No bending required. Easy to work (weight 1½ lbs.). **Each $2.25.**

Weed Killer. A powder which will certainly kill all weeds it is put on. Rid your walks of dandelions, morning glory, etc. **Lb. pkg., 65c; 5 lbs., $2.50.**

Wire Hanging Baskets. Handsome baked green enameled wire baskets. Shipped at purchaser's risk; liable to become bent.

	Each	Weight	Per doz.	Weight doz.
8-inch.....	**$0.20**	½ lb.	**$2.25**	5 lbs.
10-inch.....	**.25**	¾ lb.	**2.75**	7 lbs.
12-inch.....	**.35**	1 lb.	**3.50**	9 lbs.
15-inch.....	**.50**	1½ lb.	**5.00**	15 lbs.

INSECTS AND REMEDIES

Many insecticides may be prepared economically on a large ranch, which are for every small garden and orchard much better purchased already prepared. Such are Bordeaux Mixture and others of which we carry a number offered on pages 119 and 120. For large orchards we have Black Leaf 40 for thrips and Corona Dry Arsenate of Lead for Codlin moth, cutworms, etc.

Insects are classified for treatment into two classes—first, those which eat the leaf, and second, those which suck the juices from the leaf or stem. The treatment for the two is quite different. Mildew is quite different still, being a plant growth.

AGAINST APHIS or PLANT LICE—either green or purple or woolly, and all other sucking insects. These attack roses, fruit trees, and many plants; woolly aphis especially apples. Any of these following sprays are good: Byrne Plant Tonic and Insecticide (1 oz. to 4 gallons); Readeana (1 oz. to 1 gallon); Aphine (2 to 4 tablespoonfuls to 1 quart); Kerosene Emulsion (1 part to 20 of water); any tobacco or nicotine solution, such as Black Leaf 40 (1 oz. to 8 gallons); Nico-Fume Liquid (2 teaspoonfuls to 1 gallon); Nikoteen (2 teaspoonfuls to 1 gallon); Rose Leaf Extract (diluted 1 to 40); or Sulpho-Tobacco Soap.

AGAINST SCALES OF ALL KINDS: Spray with lime sulphur solution, especially when trees are dormant, and extra strength can be used. Kerosene emulsion is also effective. Other remedies are used in orchard practice.

AGAINST CATERPILLARS, CUTWORMS, ARMY WORMS, ROSE BEETLES, diabrotica or flea beetle (often mistaken for green lady bugs), and all insects which eat the leaf use either dry or as a spray. Paris Green, (1 lb. to 200 gallons of water); Corona Dry Arsenate of Lead (2 to 4 lbs to 100 gallons of water); Hellebore (4 oz. to 2 gallons) where arsenic is too dangerous, such as on berries. When used dry mix Paris Green with lime, 1 lb. to 3 lbs. of lime.

AGAINST SLUGS. Use Byrne Ant Destroyer and Slug Exterminator. Other remedies are Slug Shot and Paris Green, either sprayed plentifully or mixed in a poison mash made of ½ lb. Paris Green, 1 quart molasses and 25 lbs. bran.

AGAINST MILDEW OR RUST. Spray with Bordeaux Mixture, or Atomic Sulphur, or in warm places dust with Sulphur. Remember these are not remedies, they only prevent the disease from spreading. Therefore apply early, before the disease starts.

AGAINST WEEDS IN WALKS AND ROADS. Sprinkle **with Herbicide or Weed Killer.**

SOME OF THE MOST COMMON TROUBLES

Almond—Red Spider—Spray with lime-sulphur solution, or atomic sulphur.

Apple—Codlin Moth—The cause of wormy apples, spray with Corona Dry when calyxes of blossom are open, and repeat.
Woolly Aphis. Spray with kerosene emulsion and apply double strength to roots, also dig in Tobacco Dust.

Cabbage—Cabbage Worm—Spray with Paris Green or Corona Dry **before** the heads form.
Lice—Remedies given above for Aphis.

Dahlia—Flea Beetle—Paris Green or Corona Dry; or Bordeaux Mixture used as a repellant.

Grape—Leaf Hopper—Spray with Black Leaf 40 (diluted 1 to 1000).
Mildew—Dust Dry Sulphur.

Hollyhock—Rust—Spray early with Bordeaux Mixture.

Orange—Scales—Fumigation with Cyanide is best.

Peach—Borers in Tree Trunk—Dig the grubs out and mound trees.
Curled Leaf—Spray with Lime Sulphur **before** the buds swell in spring; follow, if necessary, with Bordeaux afterwards.

Rose—Aphis or Plant Lice—Remedies given above.
Mildew—Spray with Bordeaux Mixture. Apply Grape Dust; water only in the morning.

Snapdragon—Rust—Spray early with Bordeaux Mixture.

More information is given in "Farm and Garden Rule Book" on these and many other subjects. **Price $2.00; postpaid, $2.15.**

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English	German	French	Spanish	Italian
Artichoke	Artischoke	Artichaut	Alcachofa	Articiocca
Asparagus	Spargel	Asperge	Esparrago	Sparagio
Beans, Dwarf	Krupp-Bohnen	Haricot Nains	Frijole nano	Faginolo nani
Beans, Pole	Stangen-Bohnen	Haricot a Rames	Habichuelas enrideraderas	Faginolo rampicanti
Beet	Salatruben	Betterave	Remolacha	Barbabietola
Broccoli	Spargelkohl	Chou Brocoli	Broculi	Brocoli
Brussels Sprouts	Rosenkohl	Chou de Bruxelles	Berza de Brusels	Cavolo di Brusselles
Cabbage	Kopfkohl, Kraut	Chou pomme	Col repollo	Cavolo cappuccio
Cabbage, Savoy	Wirsing	Chou de Milan	Col de Milan	Cavolo di Milano
Carrot	Carotten, Mohren	Carotte	Zanahoria	Carota
Cauliflower	Blumenkohl	Chou-fleur	Coliflor	Cavoloflore
Celery	Sellerie	Celeri	Apio	Sedano
Celeriac	Knoll-Sellerie	Celem-rave	Apio-nabo	Sedano-rapa
Chervil	Kerbel	Cerfeuil	Perifollo	Cerfoglio
Chicory	Cichorienwurzel	Chicoree sauvage	Achicoria	Cicoria selvatica
Collards	Blatterkohl	Chou cabu	Cabu	
Corn Salad	Feldsalat	Mache	Canonigos (macba valeriassilla)	Valeriana
Corn	Mais	Mals	Maiz	Mais
Cress	Garten-Kresse	Cresson alenois	Mastuerzo	Agretto
Cress, Water	Brunnenkresse	Cresson de fontaine	Berro	Nasturzio aquatico
Cucumber	Gurken	Concombre	Pepino	Cetriolo
Dandelion	Lowenzahn	Pissenlit	Diente de leon (Amargon)	Dente di leone
Egg-plant	Eierpflanze	Aubergine	Berengena	Petronciano
Endive	Endivien	Chicoree Endive	Endivia	Indivia
Kale	Blatterkohl	Chou frise	Breton Col	Cavolo verde
Kohl Rabi	Kohlrabi	Chou-rave	Colinabo	Cavolo rapa
Leek	Porree, Lauch	Poireau	Puerro	Porro
Lettuce	Lattich, Kopfsalat	Laitue	Lechuga	Lattuga
Melon, Musk	Melone	Melon muscade	Muscate	Popone
Melon, Water	Wasser-Melone	Melon d'Eau	Zandia	Melone d'aqua
Mushroom	Champignonbrut	Champignon	Seta	Fungo pratajolo
Mustard	Senf	Moutarde	Mostaza	
Nasturtium	Kapuciner-Kresse	Capucine	Capuchina	Nasturzio
Okra	Ocher	Gombaud	Quimbombo	Ocra
Onion	Zwiebel	Ognon	Cebolla	Cipollo
Parsley	Petersilie	Persil	Perejil	Prezzemolo
Parsnip	Pastinake	Panals	Chirivia	Pastinaca
Peas	Erbsen	Pois	Chicaroso Guisantes	Pisello
Pepper	Pfeffer	Piment	Pimiento	Peperone
Pumpkin	Kurbiss	Potiron	Calabaza totanera	Zucca
Radish	Radies	Radis	Rabanito	Ravanello
Rhubarb	Rhabarber	Rhubarbe	Ruibarbo	Rabarbaro
Salsify	Haferwurzel	Salsifis blanc	Salsifi blanco	Sassefrica
Spinach	Spinat	Epinard	Espinaca	Spinace
Squash	Kulchen-Kurbiss	Courge	Calabaza	Zucca
Tomato	Liebesapfel, Tomate	Pomme d'Amour	Tomate	Pomo d'ore
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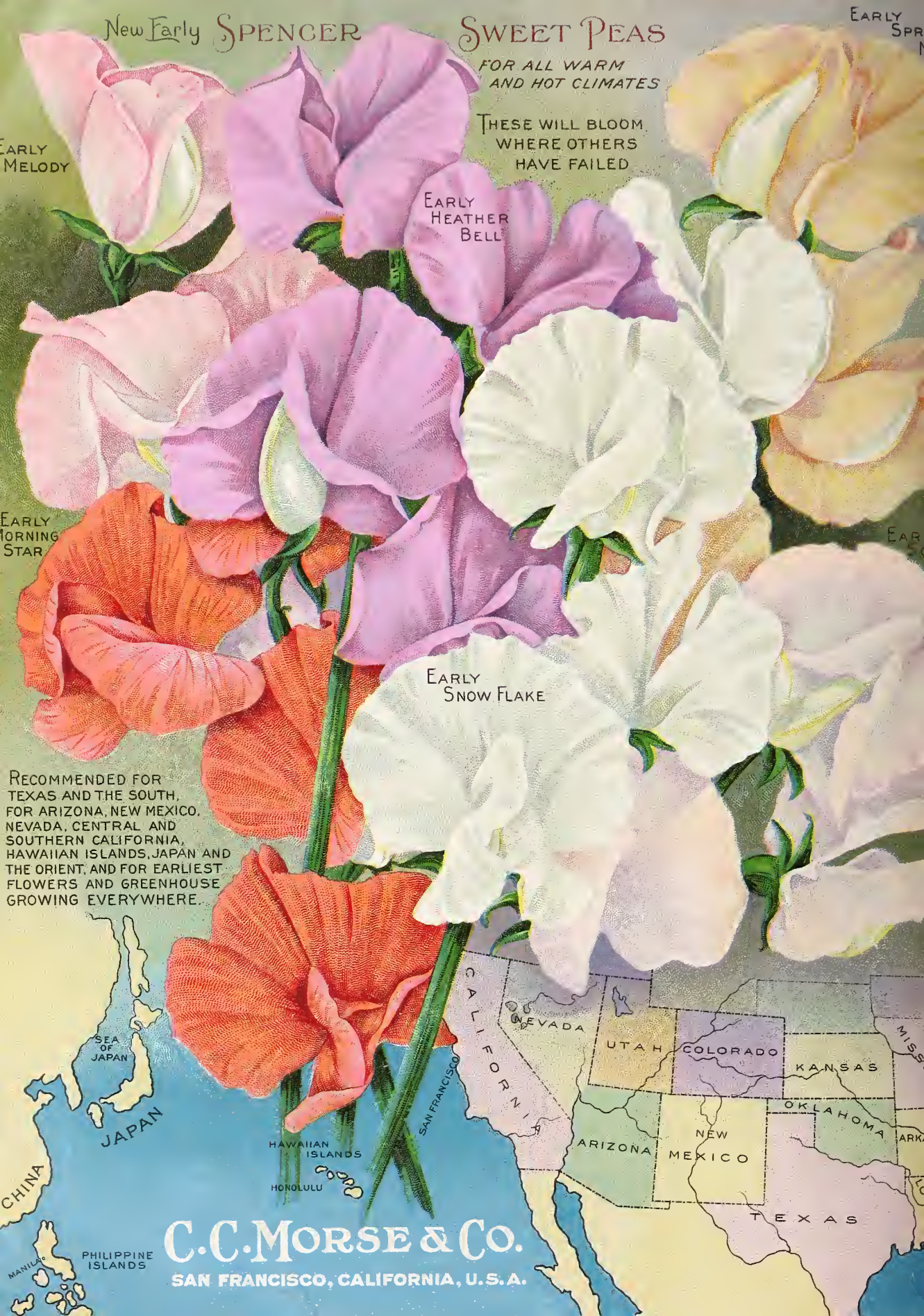
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